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EARTHWORK OF ENGLAND



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III

EARTHWORK OF ENGLAND

PREHISTORIC, ROMAN, SAXON, DANISH,
NORMAN, AND MEDIÆVAL

BY

A. HADRIAN ALLCROFT, M.A.

Illustrated with Plans, Sections, &c.

“RELIQUIAS VETERUMQUE VIDES MONIMENTA VIRO-
RUM”

VERGIL, *Æn.* viii. 356

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"Time, which antiquates antiquities, and hath an art to make dust of all things, hath yet spared these minor monuments."

SIR THOS. BROWNE,
"Hydriotaphia."

"History has been written with quipo-threads, with feather-pictures, with wampum-belts; still oftener with earth-mounds and monumental stone-heaps, whether as pyramid or cairn: for the Celt and the Copt, the Red Man as well as the White, lives between two eternities, and warring against Oblivion, he would fain unite himself in clear conscious relation, as in dim unconscious relation he is already united, with the whole Future and the whole Past."

T. CARLYLE,
Essay on History.

PREFACE

IN the general quickening of interest in all things savouring of antiquity, earthworks have had a certain share, if a small one; so that while there are a few persons who have some knowledge of the subject, there are very many more who wish to know. To the former few the writer tenders his apologies for having essayed to perform a task for which any one of them had doubtless been better qualified; to the latter many he apologizes for the task's being no better done.

His purpose has been to stimulate a more general interest in the most neglected branch of British Archæology by suggesting something of the variety and many-sided interest of the subject, the abundance of the material, the need of intelligent observation. He has tried to show that, in spite of neglect, the subject has already attained to some measure of systematization and certitude, and to point out in what directions further research is most desirable. He has tried to clear the subject of certain hoary preconceptions, to point out those details which require to be sought for, and to warn the inexperienced against some of the more obvious pitfalls which lie in the path.

For the earthworks of Scotland much has been done already, especially by Dr. David Christison, whose work on *Early Fortifications of Scotland* is an admirable

collection of varied observations and well-ordered details. It is, however, of necessity somewhat too scientific in style and method for those readers who are as yet unacquainted with the rudiments of the subject. So far as the writer knows there is no work of the like scope, whether popular or scientific, dealing with the earthworks of England, and those who would have some knowledge of them must search painfully through interminable volumes in a few scattered libraries, amongst the published *Proceedings* of scores of Societies, some famous and some scarce heard of, but all more or less alike in being difficult of access and inadequately indexed. The results of such a search must too often be nothing but a congeries of facts or theories, mostly disconnected and often contradictory. To hunt up such information, to weed out some of the contradictions, to piece the whole together into intelligible continuity—these, so far as he could adhere to them, have been the author's aims.

For some years past a limited number of enthusiasts—the Committee on Ancient Earthworks and Fortified Enclosures—has been working to educate the nation in the value and significance of its earthworks, to obtain complete lists and authoritative plans of all, and to preserve them where possible from the destruction which daily threatens them; and the enterprise of the publishers of the *Victoria County History* in including the earthworks of each county within their syllabus is deserving of the gratitude of all archæologists, as is also the scheme which aims at compiling an accurate Archæological Survey of each county. These latter must, however, of necessity remain little more than lists of the materials available. The Committee has achieved much, but the writer has always felt that its objects might be furthered in some degree if there were provided some sort of elementary text-book of the subject. This he set himself to provide, entirely upon his own initiative and

responsibility. When the volume was all but ready for the press, the Committee paid him the unexpected compliment of admitting him to membership ; but he wishes it to be distinctly understood that while his book is based upon the recommendations of the Committee as published in their annual Reports, and written expressly to further the Committee's aims, it has no claim to be an authorized representation of the Committee's views. Its author is alone responsible for what he has written.

There is probably nothing at all in the book which has not been said before, and better said, but mostly in publications not accessible to the average reader. The writer has tried to confine himself to the simple statement of facts, with no more of theory than is needed to array those facts in orderly and readable sequence. So little has as yet been done in this field that there is scarcely a single statement which might not be questioned, qualified, or flatly contradicted by some one or other, but he has endeavoured to avoid all dogmatism. If the reservations "probably," "possibly," and "perhaps," figure too frequently in the text, the fault may be cited as but another justification for the writing of the book at all, inasmuch as it suggests how very much remains to be done, and how great is the opportunity for active helpers.

In making use of the labours of other men in the subject, the writer has endeavoured to acknowledge his debt to each as occasion has arisen. Lest he shall have failed at all in this meed of courtesy, he would here make one general acknowledgment to them all, both those whose writings he has made use of and those others who have otherwise aided him with information, encouragement, and advice. His thanks are due in a special degree to C. Angell Bradford, Esq., F.S.A., for much valuable help in the compilation of the book and in the correction of the proofs. He has also to acknowledge

gratefully the kindness of Dr. David Christison in allowing him to make use of a number of illustrations given in his *Early Fortifications of Scotland*, and for the loan of the actual blocks of Figs. 102 and 109. Finally he owes a large debt to the Controller of H.M. Stationery Office, for the permission, readily accorded, to make use of the Ordnance Maps in the preparation of the plans, many of which are directly taken from those maps.

So far as might be he has restricted himself to the discussion of earthworks with which he is personally familiar. This will explain the somewhat limited range of the examples, and how limited is that range no one is more painfully aware than himself; but experience has taught him that there are few more fertile sources of error than a tacit acceptance of the descriptions of others. No matter how excellent and accurate those descriptions may be, to attempt to make use of them at second hand is to do injustice to them and to betray one's own lack of thoroughness.

The last three chapters will perhaps be considered unnecessary. The writer has added them to the book with some hesitation, in the hope that they will serve in some measure to illustrate the matter of the earlier chapters, and also possibly to awaken a more vivid realization of the interest which belongs to the subject. He selected the South Downs as the scene of one elementary lesson in applied archæology, for the reason that there is to be found the last approach to unspoilt Nature that is easily reached from the Metropolis; as the scene of the other he selected Dolebury upon the Mendips, because of its total contrast to the former.

LONDON, 1908.

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Outline Map of the South Downs from Arundel to Beachy Head

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EARTHWORK OF ENGLAND

CHAPTER I

INTRODUCTORY

*"Darkness surrounds us : seeking, we are lost
On Snowden's wilds, amidst Brigantian coves,
Or where the solitary shepherd roves
Along the plain of Sarum, by the ghost
Of time and shadows of tradition crost."*

THE construction of earthworks¹ goes back to the days of neolithic man, possibly to the days of the very earliest of neolithic men. It began, therefore, in the prehistoric age, to define which by any numerical date is at present impossible. It has continued without intermission from that age to the present time, but in these pages it will be considered as having ended in the seventeenth century.

Before neolithic man had arrived in Britain his palæolithic fore-runner had seemingly come and gone. With

¹ The term "earthworks" is used throughout in a wide sense to include all and any mounds, banks, ditches, walls, pits, &c., whether built of earth or of stone or of both, so long as these show no trace of mortar. It includes such works as the great enclosing banks and fosses of Avebury and Stonehenge, while it excludes the megaliths within them and all similar monuments, menhirs and dolmens, circles of standing stones, stone avenues, &c. Primarily concerned with remains which appear to be of defensive character, this volume includes many others—seemingly domestic, religious, funereal, &c.—wherever these may serve to point an analogy or a difference, or to convey a warning.

the latter and his times this book has no concern. So far as we know him at all¹ palæolithic man was a dweller in caves and rock-shelters, or in dug-outs upon the banks of the rivers, if he had any place of residence at all; building for himself, at any rate, nothing that merits the name of a dwelling, ignorant perhaps even of fire—an animal of a type as low as that of the lowest savage, who has left to us, of all that was his, little beyond his rude stone implements and by rarer accident his bones.² It is not known whence or when he came hither, nor how or why he departed. The curtain, barely lifted upon his dim stage, was immediately dropped again, to rise presently upon a new type of man living in an altered climate. The interval—no one knows how long—is an almost absolute blank: whatever may be the case elsewhere, in England it is at present impossible to show proof that the change from palæolithic to neolithic was the result of continuous development only, whether quicker or slower;—that the Neolith was merely the lineal descendant of the Palæolith;—that there had occurred evolution rather than revolution. Inasmuch as the interval—the Mesolithic Age so called—had sufficed for the disappearance of the most characteristic fauna of the earlier time and the appearance of wholly new varieties, it is possible the animal *homo* was likewise of a new species. The contemporaries of the Palæolithic race—of the cave-men and the river-drift-men—were the cave-bear, the

¹ Whoso desires it may find a sufficiently vivid and uninviting sketch of the man and his manners in Worthington G. Smith's *Man, The Primeval Savage*.

² Nothing that is indisputably palæolithic has thus far been found north of the Humber. He has left a whole series of pictures of the principal animals of his time, notably the mastodon, bison, and reindeer. Most of the known examples of this earliest phase of art are of French provenance: English specimens are extremely rare. They are of interest here only as confirming the view that early man was a hunter and nothing more. He drew the inspiration of his pictures from the forms with which he was most familiar.

mammoth, the woolly rhinoceros, and the sabre-toothed tiger; those of the very earliest Neolithic time were pretty much what they are to-day, with the exception of a few species—wild bull, wolf, and beaver,¹ and one or two others—since eliminated by the spread of cultivation and civilization.

The written history² of this island begins only as late as 55 B.C., when Julius Cæsar made his first landing here. There are indeed scattered references to Britain made by writers of earlier date, notably by one Pytheas of Marseilles, who, *circa* 330 B.C., sailed thus far north and remarked upon the character of the climate and the inhabitants. The gist of his remarks, as preserved in the quotations of other authors, is that the climate was damp and foggy,³ the inhabitants an agricultural people or peoples who raised considerable quantities of corn. Here are two facts which have not greatly altered in some two-and-twenty centuries.

Cæsar's⁴ evidence is more lengthy and more trustworthy, albeit, like other travellers, he was, perhaps, occasionally mistaken or possibly misinformed.

¹ The wild bull, hunted here in Roman times, now survives perhaps in the famous wild cattle of Chillingham Park, but according to another view these are themselves of Roman importation. The last wolf is said to have been killed in Ireland about 1700: it disappeared earlier in Great Britain. The beaver had gone long before, leaving only its name (so it is said) in such forms as Beverley.

² The best summary of the documentary evidence for the condition of Early Britain is to be found in Elton's *Origins of English History*. For the evidence, documentary or archaeological, of things as they were in Cæsar's time, see Dr. T. Rice Holmes' latest publication, *Ancient Britain and the Invasions of Julius Cæsar*, where most that is known, and nearly all that has been conjectured, is summarized and sifted.

³ This evil character of the climate became a commonplace with later writers. Strabo (§ 201) asserts that the sun was visible for but three or four hours at noon, and Tacitus (*Agricola* 12) says that "the climate is disgusting because of the constant rain and cloud," adding, however, the curious qualification that "the nights are clear."

⁴ *De Bello Gallico*, V. 12-14.

The *ora maritima*, *i.e.* the southern part of the island,¹ was inhabited by various tribes, immigrants from Belgium (Northern Gaul), who mostly retained the tribal names² by which their Gallic kinsmen were known. They had seized by conquest the lands of earlier inhabitants, who claimed to be indigenous (*i.e.* had been settled there so long as to have no tradition of their origin), and who retained possession of the interior parts of the island (the parts further to the north, west, and north-west). The Belgic immigrants were "a numberless population"; their buildings—the word used includes houses and towns alike—were very like those of the Belgic Gauls, and as thick as thick could be; and they owned large quantities of cattle and sheep. Trade had taught them to use a currency: it was either bronze—a rare commodity, not produced in the island, but imported—or bars of iron of standardized weights.³ There was workable iron in the coast-districts, but not much of it; and there was *plumbum album* elsewhere.⁴ Of timber the island pro-

¹ The expression certainly includes all southern Britain as far as the Thames, and probably all the southern Midlands as well.

² *E.g.*, Atrebatas, Belgæ. It is to be observed, however, that Cæsar does not speak of the men of Kent as Cantii, but as those *qui Cantium incolunt*, which suggests that they were of so mixed a race as not easily to be brought into relation with any single tribe of the Gallic mainland. All the others he speaks of by tribal names only.

³ Some of these bars are to be seen in the British Museum. Their identification is due to Mr. Reginald Smith, for they had previously been mistaken for iron swords, &c. See *Proc. Soc. Antiq.*, Vol. xx. (1904-5). There was also a gold coinage as early as Cæsar's time, but he does not mention it, unless the words *aut nummo aereo* in V. 12 should be read *aut nummo aureo*, as is probable. Perhaps the Roman copyist was loth to believe that the *picti Britanni* possessed a gold currency at a date when such a thing was still unknown to Rome.

⁴ *Plumbum album* (or *candidum*) is the usual term for tin, as *plumbum (nigrum)* is for lead. Mr. Emmanuel Green, F.S.A., has examined in a very able paper (Bedford Press, 1906) the growth of the legend that Britain was from far earlier times the seat of a vigorous tin-mining industry, and declares it baseless. Cæsar does not say that the tin was regularly mined, still less that it was exported. Strabo (§ 199) omits it from his list of British products, albeit he mentions gold, silver, and iron. Nevertheless it is not easy to understand how Cæsar could come to state the fact of its

duced the same varieties as Gaul, excepting the beech and the fir. The natives would not eat the hare, the hen, or the goose,¹ but they bred these (*i.e.* geese and poultry) for pleasure. The climate was milder and more equable than that of Gaul.

The most civilized were those inhabiting Cantium (Kent),² who differed little from the continental Gauls. The more northerly natives for the most part were not agriculturists, but lived on milk and flesh,³ and dressed in skins. All alike practised the habit of dyeing themselves with woad. They wore moustaches, allowed their hair to grow long, and practised polyandry."⁴

existence, unless the natives had to some extent exploited it ; for those were not the days of mining experts and mining concessions. Perhaps he wrote simply *plumbum*, "lead," and his copyist again amended the text in accordance with the legend already inveterate in the 1st century B.C. As Mr. Green remarks, inasmuch as the Britons are expressly said by Cæsar to *import* their bronze, they cannot at any rate have understood how to use tin as an alloy ; and in its pure form it is useless and scarcely workable. As a matter of fact the Britons possessed a coinage of tin, which may explain how Cæsar came to speak of it as a native product.

Most of what has been said or guessed about these matters—the whereabouts of the Cassiterides and of Ictis, the traditional point of exportation—will be found discussed by Dr. Rice Holmes in *Ancient Britain and the Invasions of Julius Cæsar* (pp. 483-514).

¹ The prejudice against hare's flesh is a well-known Celtic trait. That against fowls and geese is probably an error on Cæsar's part, as is unquestionably his statement about the beech and the fir. These trees certainly grew in the island, but they may possibly not have been growing at his time in the districts which he visited. A similar reservation, of course, applies to his remarks about the geese and fowls. But why did the natives breed these birds, if it was not for the table ? It must have been for sport. Certain *Gallic* coins bear the figure of a cock, unmistakably of the game type ; the continental Gauls were addicted to this form of sport when Cæsar first began their conquest ; and amongst the relics discovered in the Lake-Village of Glastonbury (p. 259) is the spur of a game-cock. As for the other bird, the Russians have a special breed of fighting geese.

² Celtic, *gwent*, "plain."

³ They were therefore still in the pastoral stage, and owned cattle.

⁴ The national pride has strongly resented this assertion, but Cæsar had a better chance of finding out than have we. He may have been misled by some custom of inheritance which he did not understand, or he may have stated of all what in truth applied only to some of the more barbarous tribes of the interior.

The important points in this brief summary are these : the population of the southern counties differed from that of the rest of the island ; it was Gaulish in origin and in culture, a highly civilized and very numerous population, whose settlements were very thickly scattered over the land. It was agricultural and commercial. On the other hand, the population of the more northern counties was of different blood and much lower in civilization, only just beginning in part to pass out of the pastoral into the agricultural stage.¹ All that he says of the *ora maritima* goes to prove that it enjoyed a fairly permanent condition of peace.

Inferentially it may further be gleaned from Cæsar that the people of the *ora maritima* still retained their tribal organization for the most part, under the governance of chiefs or kings, although on emergency or under constraint they might for a time coalesce to some extent. There was, however, as yet no national sense. The social order seems to have been based upon nothing more abiding than personal attachment to a distinguished leader, and the priesthood was a highly honoured profession making vast pretensions to learning,² and showing at any rate so much appreciation of the value of memory as to discountenance books and the making of books. The principal fighting arm was the car-fighters. They were therefore a horse-breeding people, and capable iron-smiths. Later writers tell us that they had a famous breed or breeds of sporting dogs, powerful enough to

¹ So Strabo : " Some of the tribes resemble the Celtæ, while others are so much more uncivilized that some of them do not know how to make cheese, though they have milk in plenty, and have no knowledge of garden-crops or other forms of husbandry " (§ 200).

² It might take as much as twenty years to learn the whole lore of the Druids, who taught, besides the doctrine of transmigration of souls, " a great deal about the heavenly bodies and their movements, about the size of the universe and of the world, about natural philosophy, and about the influence and power of the gods " (*B.G.* VI., 13).

pull down a bull;¹ that their artistic sense made them amongst the best of all workers in mosaie, and their stature and their capacity for hard work made them desirable slaves. That they could fight is confessed by Cæsar's speedy abandonment of any schemes of conquest. The invasion of 55 B.C. was a mere scouting expedition; that of 54 B.C., if it brought the Romans a little way north of the Thames, sent them back again upon the first plausible excuse. They did not return until 43 A.D., all but a century later, and history during the interval tells us next to nothing which bears upon the state and progress of civilization in Britain. We only know that, as in much more recent days, its people fell into bad odour with the continental power as a people who harboured political refugees and preachers of sedition.

If history is silent prior to Cæsar's coming, tradition tells us little more. In the Welsh *Triads* it is asserted that there came into the island three successive swarms of invaders from the mainland, viz., Lloegrians, Goidels, and Brythons. It has been maintained that the name of the Lloegrians answers to that of the Ligurians, and denotes a short, dark race who came from the south of France, akin to the Auvergnats. The Goidels must be the true Celtæ,² whom Cæsar carefully distinguishes from the Belgic Gauls. To the last-named would correspond the

¹ These, says Strabo (§ 200), were exported to Gaul for use in war, presumably as watch-dogs.

² Goidel is nowadays more familiar in the form Gael. According to Macbain (*Celtic Dictionary*), Gael is identical with Gwyddel, which is the modern Welsh for "Irishman," but in earlier times meant "woodman." The Irish are Gaelic, the Welsh (Cymru) Brythonic Celts. The tempting identification of the Latin *Celtæ*, the Greek *Γαλαται*, and the Welsh *Gwyddel*, is traversed by the philologists, who, however, cannot agree upon any alternative explanation. Prof. Rhys thinks *Celt* akin to *Hild*, "war," and would render it "the Smiters"; Macbain refers it to the same root as *Celsus*, "lofty." *Gwyddel* he refers to a root meaning "good," while Stokes would connect it either with a root signifying a "he-goat," or with one meaning "a cock."

Brythons, whose name means "the tattooed men," and alludes to their habit of woad-painting. The name of the Picts seems to have the same meaning, and modern research tends to show that they too were of Brythonic rather than of Gaelic stock.¹ If so, then, from their geographical position in the north of Britain, either they must have been an earlier swarm of immigrants subsequently driven northward by the intruding Goidels, or they must have made their entry into the island at a more northerly point than the other invaders. In old Welsh *Lloegria* was the accepted name for what is now England. From the name of the Brythons is said to be derived that of Britain—*Ynys Prydain*—and of the Britons. Tradition, therefore, appears to acknowledge precisely the same blend of precisely the same elements in the populations of Britain and of Gaul alike. Tradition is not proof, but it has an obstinate trick of proving itself true.

There remains to fall back on only Comparative Archæology. This is the Autolyceus of the sciences, whose business is the picking up of unconsidered trifles, whose solitary instrument is the spade. It has reconstructed an Empire out of a shoe, rewritten the history of the Mediterranean nations by the help of potsherds, and reduced to relative modernity even the Sphinx itself; but characteristically the English, who have done so much for the Hittite, the Minoan, and the Egyptian, have as yet scarcely concerned themselves to apply the same methods to the secrets of their own soil. Yet Comparative Archæology is the one and only key which can unlock those secrets, and in the few cases where the test has been applied the results have been so abundant and startling that only the national disregard of everything national can explain the lack of a host of scientific diggers at home. Our enthusiasms, in this as in other matters, are

¹ So Macbain, who identifies them with the Gallic *Pictavi*, who have left their name in *Poitiers*.

all for the wider world beyond the seas, and mostly for other peoples than our own kindred.

Nevertheless something has been done even for England since first the science was developed some forty years ago;¹ and if it be true that *c'est le premier pas qui coûte*, then the worst is already done. The Comparative Archæologist has established his claim to speak with authority even at home. His text is simple enough: Out of the earth must the secrets of the earth be dug. The task may be costly; it demands an infinity of patience and laborious detail; but its compensation is that its conclusions, wisely drawn, are irrefragable, and even when rashly made are still something more than mere guesses at truth. It is based, as all science must be, upon evidence. It has discredited the whole legion of irresponsible theorists who were wont to make one's flesh creep with horrid tales of Druidism, and to blind us with the glamour of Phœnician Argosies and Phœnician Baal-worship. Its treasures are flints and pebbles, its most valued premisses are shards; and as the biggest of all birds was by comparative anatomy recreated from a single bone, so Comparative Archæology is laboriously reconstructing the history of the civilization of Britain out of the litter of the centuries—litter which even the prehistoric savage of the earliest neolithic dawn flung away as valueless.

The culture of the earliest neolithic peoples was different from that of the palæolithic time: man was still

¹ The pioneer of scientific work in this direction upon English soil was the late Major-General Pitt-Rivers. The results of his labours, to which reference must repeatedly be made by any other inquirer in this field, are published in a number of sumptuous volumes, unhappily too costly to be generally accessible. It is very much to be wished that some epitome of his methods and conclusions may speedily be put within reach of the general public. This ought to be one of the first, as it would certainly be one of the most useful, tasks of those who seek to awaken an intelligent interest in the subject of prehistoric archæology in general.

low down upon the ladder of progress, but he had at any rate commenced to climb it. He knew the use of fire, and he had domesticated the ox,¹ and for himself and his cattle he built shelters. His weapons and implements were still of stone, but the types and the workmanship were alike greatly improved. He still clothed himself in skins, but he had learnt how to stitch these with needles of bone. How he dealt with his dead is not known; he may have left them where they fell, or burned or buried them in or near his hut, or even eaten them occasionally. His ideas about religion are equally uncertain, if they had any existence, and of his social system we know only that he was a shepherd. This fact implies that there were pasture-grounds to be found, and that he frequented them. England, therefore, was not altogether covered by forests. The lower ground was still certainly forest and fen, but some at any rate of the uplands were open ground. Here, then, the pastoral men must have gathered, and if there were any population of the lower levels those must have been hunters and fishers only. In the choice of a dwelling-place the shepherd-folk had two things to consider, good pasturage for their flocks, and a supply of suitable stone for their weapons. Of all stone the most suitable was flint, and flint is a product of the chalk; and the chalk hills were probably nowhere very densely wooded, in many places entirely treeless. Upon the chalk hills, therefore, neolithic man found the best aids to his advancement, *i.e.* upon the high ground of the southern and south-eastern counties, from Dorsetshire to Norfolk, from Wiltshire to Kent. Here, because the advantages were the greatest, his progress would be most marked; here, because of the contiguity of this part of Britain to the Continent, we should expect to meet him

¹ The date of the domestication of the sheep was apparently later than that of the ox; that of the horse latest of all. The dog was early domesticated, but at what date is difficult to say.

first, most frequently, or in the fullest measure of his development. Here in the *ora maritima* Cæsar found the Britons of the Iron Age most progressive, and here archæology shows their predecessors also to have attained their highest culture. Here was centred the wealth and luxury of Roman Britain, and here to this day the standard of English life is highest. The facts are merely the expression of a geographical law; the nearer to the Continent the higher the culture, and, conversely, the further from the Continent the greater the barbarism.

Comparative anatomy has established the fact that there were two distinct physical types in Neolithic Britain, a long-headed and a round-headed race. Of these, the long-headed, or Iberian, was the earlier. Before it was supplanted by the later round-headed race, it had, at any rate, so far advanced in culture as to bury its dead—sometimes—and often at the cost of considerable trouble. The dead were buried in barrows, which, by a happy accident, were likewise long, whereas the round-headed race built barrows which were round.¹ It is usual to see in this care for the dead the expression of some sort of religious belief.

The introduction of pottery marked a more material advance of the very first importance. At first hand-made of extremely coarse clay, full of accidental impurities, and carelessly baked, it was gradually improved upon. The firing was more thorough, the material was more carefully selected and prepared, the workmanship became more

¹ This statement must not be strained, for long-headed skulls have been found within round barrows. That long barrows are as a type earlier than round barrows is the fact established, but there must have been considerable over-lap. Similarly the long-headed race preceded the round-headed, but there was very considerable mixture of the two. For the whole question of the ethnology of the pre-historic time, see T. Rice Holmes' *Ancient Britain*. Craniology and anthropometry have not achieved so much as was claimed for them a generation ago in this or in any other country, and possibly the task was exceptionally difficult in regard to an island which appears to have been the dumping-ground of the nations from the very beginning of things.

skilful, greater variety of form was introduced, and various styles of decoration of increasing complexity and finish were successively elaborated. The invention of the potter's wheel came late.

The fragments of pottery which strew the ground on almost every spot where there has been a human settlement are of extreme value to the archæologist. Being to all intents indestructible, their record remains where every trace of greater works, or even of metal, has vanished. Certain definite forms, certain characteristics of the paste, firing, and ornamentation, have been so far determined that the expert can assign to each fairly narrow limits of date. This evidence, however, requires to be used with the greatest caution, for everything depends upon a reliable record of the circumstances under which a fragment is found—the character of the soil in which it lies, the depth at which it is discovered, and the character and relative position of other objects, if any, associated with it. Allowance has further to be made in particular for the two factors of trade-importation and local peculiarities. At the present day, when practically the entire output of a particular class of goods may be produced at and distributed from one or two centres, by workmen all trained in one method and furnished with the same appliances, there is little or no difference to be observed in the articles used in widely different localities. In earlier times the case was different, and the difference becomes greater as the date goes further back. An accurate knowledge is required not merely of ancient pottery in general, but of the varieties usually found in the particular district, before any reliable conclusion can be arrived at; and it must never be taken for granted that specimens found, *e.g.* in Somersetshire, because they resemble others from the East Coast, are therefore necessarily of the same date, of the same provenance, or the work of the same people. The most they actually prove is similarity of

culture, but it is certain that the culture of different areas at any one date in ancient times varied very widely indeed, even within the narrow limits of Britain. On the other hand, due allowance has to be made for the fact that certain types of earthenware remained in use, either in the same or in different localities, for centuries. Quantities of black pottery, closely resembling the well-known Upchurch ware of Roman times, were made and used throughout the earlier Middle Ages.

The art of weaving was another great advance. With it came the spindle-whorls of burnt clay and of stone, which are constantly found in excavations, and the combs of wood or bone for carding the wool. But here again there is need of caution. Whorls of stone, if not of earthenware, were made and used for many centuries later in England.¹

There is no evidence that the earlier neolithic peoples knew anything of agriculture. This also was a later development, and may be regarded as the final step towards settled civilization. Nationality is a thing unthinkable apart from locality, and the soil is still the sheet-anchor of all permanent governments. The men of the Bronze time had become familiar with oats, beans, and wheat, as cultivable crops. In the Iron Age the farmers' horizon was wider still. But as in other respects, in agriculture too the various parts of the island developed with varying rapidity. Cæsar is authority for the assertion that, in his time, there was little agriculture in the *pars interior*. A century later the British Isles were known as a source of the world's corn-supply, and Pliny says the natives were sufficiently advanced to use marl as a scientific manure. While many of the hill-terraces are of

¹ These whorls, their purpose entirely forgotten, are commonly regarded with something like superstition by the peasantry who dig them up, and are known in some districts as "adder stones." Mitchell says (*The Past in the Present*) that he actually saw them in use in the Scottish Isles as late as 1864.

other formation, it is scarcely questionable that some of them were the work of agriculturists of the Iron Age, if not of the Age of Bronze or even of that of Stone. Primitive Man was a nomad until his flocks and his fields brought him to a standstill. He built himself a permanent stronghold because his flocks or his crops demanded that he should be a nomad no more. To think of him as first building such a stronghold, and subsequently developing the culture of flocks and crops, and the other elements of civilization, is to think the wrong way round.

Stone and bone were the materials of which were made most tools and weapons. Wood was also used, but has mostly perished. In certain soils even bone is rapidly dissolved, but stone defies everything except purposed destruction. The study of stone implements is a science in itself, but the most amateur of excavators requires to have some slight acquaintance with it, so as to be able to discriminate between worked and unworked stones, and to recognize at sight not only such unmistakable pieces of handiwork as celts and arrowheads, saws and knives, but the less obvious types of scrapers, strike-a-lights, borers, and fabricators, and the still less obvious hammer-stones, whet-stones, sling-stones, mealing-stones, and pot-boilers. The use of stone for various purposes continued long years after the introduction of bronze, and even of iron, but in ever decreasing proportion as the metals supplanted the cheaper but less tractable material. There were parts of Scotland, for example, whose inhabitants remained to a great extent men of the Stone Age until the Middle Ages were elderly.

The introduction of bronze into northern Europe is thought to have occurred about 1800 B.C., that of iron about 500 B.C.¹ Relics of antiquity, which belong to a

¹ The dates are those accepted by the authorities of the British Museum (1902). Other authorities prefer other dates, fixing the first introduction of bronze at various periods from 2000 B.C. to 1200 B.C.

state of culture ignorant of the uses of metal, are said to be of the Stone Age. Such as are associated with bronze, but not with iron, are claimed as of the Bronze Age. Last of all, and speedily merging into the historical period, come those of the Iron Age.¹ With the earlier part of the Stone Age—the Palæolithic Time—earthworks, as has been already said, have nothing to do; they belong to the succeeding periods—the Neolithic, the Bronze, and the Iron Ages, and the historical period thereafter. But it must be clearly understood that these expressions have reference not to dates but to certain standards of culture. The use of bronze or of iron was certainly familiar to some tribes of southern Britain long before it became common to those of the interior, not to speak of the remote parts of the island or of Ireland; so that even within the small area of Great Britain there existed contemporaneously communities of all three Ages, and there is no definite date at which any one of the three can be said to begin or to end. Despite the levelling influence of modern intercourse and rapid communication there are still in the world tribes who have not yet emerged from the Stone Age. In pre-historic times, when intercourse was very limited and communication extremely slow, the inequalities of culture were far more marked. It must be remembered also that the Stone Age was of a duration quite undeterminable by chronology, but immensely long. The interval between the first appearance even of Neolithic Man and the introduction of Bronze must, at any rate in England, be thought of as expressible only in thousands of years.

Iron is believed to have been introduced into Britain by

¹ Accurate discrimination between relics of the Ages of Bronze and of Iron is made the more difficult because of the liability of iron to disappear completely through rust. Its total absence from any site is not in itself proof that it was unknown at the date when that site was occupied. The *argumentum ex silentio* is specially dangerous in this case.

a Celtic race. Whether the introduction of bronze can likewise be attributed to any one race is not yet clear. All the evidence goes to show that there was a constant succession of fresh peoples moving from the Continent westward to the island, and each would bring with it new elements of culture gathered upon the way. As they successively entered the island they drove before them its previous occupants, who, falling back to remoter districts, in turn ousted the earlier settlers there. Thus, the newcomers landing usually upon the south, south-eastern, and eastern coasts, it is in those parts that the more advanced culture is found, the standard of civilization falling as one passes further to the north and the west. The tribes of the *ora maritima* in Cæsar's time were in much the same phase of culture as were the Gauls, but probably at the same date a portion at least of the inhabitants of Strathelyde and Wales were unqualified savages;¹ and when the Romans left the island the tribes of Scotland were savages still, while those of Britain generally were fairly advanced in civilization. Even to-day the same fact is recognizable. The standard of life in the Orkneys, in Lewis, in Connemara, is relatively as far below that of the home-counties now as it was 2,000 years ago.²

There is no doubt that in the Bronze and Iron Ages the more vigorous and progressive part of the population was

¹ Diodorus Siculus (v. 32) asserts that some of the British tribes were reputed to be cannibals even in his day, and he was later than Cæsar; and Strabo, writing at much the same date, describes the Irish as living in most degraded savagery.

² See on this matter especially A. Mitchell's *The Past in the Present*, an elaborate study of survivals, and perhaps the best commentary upon Pitt-Rivers' *Essays* which could be desired. There is a constantly increasing mass of evidence to show the inequality of culture throughout ancient Britain, and it is more than possible that many of the inhabitants of the country north of Trent were still in the Bronze Age, cave-dwellers and nomads, far into the days of the Roman occupation. The degree of culture discoverable amongst the remains of the four northern counties is extremely small.

of Celtic and Belgic stock. The true Celts were the round-headed race who succeeded the long-headed Iberians; the Belgæ were more closely related to the Teutonic stock. There is some evidence that the immigration of tribes of more or less purely Teutonic blood began at a very remote period, and continued without cessation until the final settlement of England by Saxons, Jutes, Angles, and others. In all probability there were settlers from the Baltic and Frisian coasts¹ established here before the Roman conquest, and it is generally admitted that others continued to make good their entry during the period of the Roman occupation; long before the legendary coming of Hengist and Horsa and the final flood-wave of Saxon conquest. The analogues and affinities of the peoples and the culture of early Britain are therefore to be looked for anywhere in the wide area lying between Scandinavia and Spain, and eastward to Hallstadt in the Tyrol. And if the majority of such foreign contacts were made by conquest and force, peace also had its victories and trade was never at a stand-still. Trade-relations existed from very early times with the Baltic, with the whole area of Gaul, and so with the great markets of the Mediterranean, and in another direction by way of Spain with the "Phœnicians," *i.e.* the Carthaginians of Northern Africa. One of the most fascinating and most intricate branches of comparative archæology is concerned to trace out the gradual passage of new forms of industry, new types of art, from one country to another, and thus reconstruct the culture-chart of prehistoric times.

That Neolithic Man very early developed some sort of religion is undoubted, but exactly what was its character

¹ Roman writers declare that the Cymru themselves came originally from the shores of the Baltic, whence some wandered to Britain, to leave their name in Cambria and Cumberland. It would be nothing extraordinary if those who replaced them on the Baltic presently followed westward along the path of their migration to Britain.

is as yet unknown. That some of our surviving earthworks were originally constructed for religious purposes, incidentally that is, is universally admitted;¹ but precisely what that religion was in any particular case is mostly matter of conjecture. Probably the oldest was nothing but the fear of ghosts, later dignified with the name of ancestor-worship; and ancestor-worship may take forms as widely different as the rituals of Rome, of Egypt, and of China, to say nothing of less-developed peoples. Vastly later in the history of culture comes anything more exalted, and in particular astronomical religion, that is, the worship of sun, moon, and stars; for such worship implies the development of some sort of astronomical science and observation, be it never so empirical.² The religion of the Celts and the Belgæ of Cæsar's time, appears to have been, in part at least, astronomical, but there is as yet no proof that they learnt this cult from the Phœnicians, still less from Chaldæa, and the theory which would attribute to all their earthworks a religious purpose requires no refutation. The most, and the most impressive, of those monuments which are believed to be of religious character, belong to the Bronze Age. Sir Norman Lockyer endeavours from astronomical data to determine the approximate age of such monuments as Stonehenge, and to show that the differences noticeable in monuments of this class are to be explained by differences of cult and therefore of date. He brings forward evidence to show that there have existed in

¹ In a certain sense, all burial was, perhaps, originally due to religious feelings, and if so, the long barrows, which are commonly supposed to be our very oldest specimens of earthwork, are due to religion.

² The question whether primitive astronomy was *necessarily* intermixed with religion cannot be discussed here. Probably it was so in fact, but it is at least possible that some earthworks which are usually called religious were in reality astronomical only—observatories, that is. There are still people to be found who, though they have forgotten or forsworn other forms of religion, believe in the influence of the stars.

Britain two distinct systems of astronomical worship, one based upon the May-November year, the other upon the June-December year. According to the usual view, so great a difference in a matter so important as religion, points very decidedly to a corresponding difference of race. This is quite possible, and even likely, but it is at present impossible to establish the point. Considering that Britain has seemingly *ab initio* been the meeting-place and asylum of each and every nation drifting westward, it is not wonderful that even in the earliest times its population should present a most perplexing and composite character. It may be doubted whether any area of the same size can offer a more varied series of problems ethnological and archæological. Yet the Englishman, as a rule, prefers to devote his labours, means, and imagination to the solution of the problems, not a whit more interesting, of countries much more remote and frequently offering far less material to work upon.¹

The extent and variety of the field awaiting exploration in England is only to be realized at the cost of some effort. Professor Windle² has made a tentative list of upwards of 900 camps, presumably pre-Roman, in England alone, and the actual number may very likely be as many again. To these are to be added Roman works in scores, Norman works by hundreds, while of the tale of moats and moated sites, and the almost endless variety of miscellaneous

¹ The organization in the current year (1908) of a powerful committee under the auspices of Liverpool University to investigate the antiquities of Wales, Roman and prehistoric, is a hopeful sign of better things to come. Many of the local Societies are doing what they can, but their work would be greatly facilitated by closer co-operation and—what is of still greater importance—the more lively interest and more sympathetic support of all,

² See the various lists given in his *Remains of the Prehistoric Age in England*. In his *Early Fortifications of Scotland* Dr. Christison mentions in that country a grand total of 1,079 “forts” on the Scottish mainland, excluding the Isles, and taking no account of works rightly or wrongly called Roman, of dykes, or of other *miscellanea*.

earthworks—dykes, moot-hills, barrows and other mounds, village-sites, enclosures, pits, and what not—there is literally no end. And of all these, saving only the barrows, which have received a proper meed of attention, barely a few scores have been examined. For practical purposes only enough has been done to show how the task ought to be done. The tools and the method have been determined: well nigh the entire field lies open to all who care to peg out a claim.

If it be the hope of making new discoveries that draws men into new fields of thought, the study of earthworks should prove an attractive one, and it is as broad as it is attractive. Of all the many thousands of earthworks of various kinds to be found in England, those about which anything is known are very few, those of which there remains nothing more to be known scarcely exist. Each individual example is in itself a new problem in history, chronology, ethnology, and anthropology; within every one lie the hidden possibilities of a revolution in knowledge. We are proud of a history of nearly twenty centuries: we have the materials for a history which goes back beyond that time to centuries as yet undated. The testimony of records carries the tale back to a certain point: beyond that point is only the testimony of archæology, and of all the manifold branches of archæology none is so practicable, so promising, yet so little explored, as that which is concerned with earthworks. Within them lie hidden all the secrets of time before history begins, and by their means only can that history be put into writing: they are the back numbers of the island's story, as yet unread, much less indexed. Heretofore the alphabet has been regarded as the key of knowledge; to-day it is the spade.

Subjoined is the classification of defensive earthworks recommended by the Committee on Ancient Earthworks and Fortified Enclosures. So far as possible the arrange-

ment of the subsequent chapters is based upon that classification: with such modifications and additions as the scope of the work demands.

- A. Fortresses partly inaccessible, by reason of precipices, cliffs, or water, additionally defended by artificial works, usually known as promontory fortresses.
- B. Fortresses on hill-tops with artificial defences, *following the natural line of the hill*.
Or, though usually on high ground, less dependent on natural slopes for protection.
- C. Rectangular or other simple enclosures, including forts and towns of the Romano-British period.
- D. Forts consisting only of a mount with encircling moat or fosse.
- E. Fortified mounts, either artificial or partly natural, with traces of an attached court or bailey, or of two or more such courts.
- F. Homestead moats, such as abound in some lowland districts, consisting of simple enclosures formed into artificial islands by water moats.
- G. Enclosures, mostly rectangular, partaking of the form of F, but protected by stronger defensive works, ramparted and fossed, and in some instances provided with outworks.
- H. Ancient Village sites protected by walls, ramparts or fosses.
- X. Defensive works which fall under none of these headings.

Persons otherwise regarded as men of brains have asked the writer "What can you see in things of this sort? They are all alike to us." *Intelligibilia, non intellectum adfero*: to the blind the universe is pretty much all alike. There is probably no branch of inquiry in which it may be said with more literal truth that every example is unlike all others. To detect the differences, to metho-

dize them, to hunt the map over in the splendid uncertainty that here, or there, or on the next hill-top, we may happen upon some indifferent difference which may give the clue to a brainful of problems—it is a fascinating chase, and though one's hopes elude one still, they lead one out into the high places of the earth, the untrodden ways, the wind and the sunlight.

And one never knows where or when one may make a fresh discovery. Earthworks, it might be supposed, are so obvious that they must long since have been all noticed, recorded, and mapped, at least in this over-populous island of ours. Not at all. Generations of men have walked over scores of such things without ever noticing their existence. It requires genius to notice what is obvious. Not a year passes without the discovery of new earthworks which have waited for hundreds, nay, for thousands of years, for mere recognition. In such a case as that of Wallington Camp, long since buried out of sight, later generations may stand excused; but there are other instances in plenty to prove that human intelligence so-called is mostly an infinite capacity for shutting one's eyes. It is barely a dozen years since the works at Grassington in Wharfedale, covering over 200 acres of ground and rich in all kinds of relics, were first noticed; some three years only since another group—fosses and banks and mound complete—were for the first time remarked within five miles of Cambridge; and only last year attention was drawn to some earthworks in valleys of Sussex, up and down which men have wandered heedlessly for centuries. The erection of a new factory near Allendale Town, causing the heather upon the adjacent moors to perish, revealed the perfectly preserved outlines of a great camp; and there may well be a hundred such things still lost among the deep heather and the woods of the remoter northern fells and valleys. In scores of villages and towns the mounds and trenches,

bigger or smaller, which alone mark the sites of British forts and Roman stations and Norman castles, still retain fragmentary existence, but they are so obvious, so much a part of the recognized features of the spot, that they excite no remark. Year by year they are being slowly levelled down, and in the end they mostly perish utterly without ever having been remarked at all. Yet a score of agencies are for ever thrusting before unseeing eyes the evidence of their presence, perhaps the clue to their purpose and their history, and in vain. The moles and the rabbits, as well as the plough, are daily turning up the shards and coins, the implements and bones and *tesserae*, which are the *disjecta membra* of history. The moles and the rabbits have betrayed the secrets of a dozen cities; and from mole-heaps and rabbit-casts the antiquary who has no licence to dig may yet fill his pockets with specimens of antiquity on any one of a thousand sites. The botanist holds other keys to the past. Where he finds Henbane or Black Horehound, or even the caustic Greater Celandine, was once in all likelihood some mediæval garden-ground, some forgotten mansion or lost village. Finding a plant of vervain (*Verbena officinalis*) by the road-side at Well in the North Riding, a local botanist told the writer that he had at once concluded there must have been some Roman settlement at hand; and two years later were brought to light, not fifty yards away, the ruins of a villa. Chives, which grow wild along the Wall, are said to have been introduced by the Romans, not less than the purple-flowered *Erinus Hispanicus*, which is alleged to be found in England only upon the site of Roman Cilurnum. In popular belief the Dwarf Elder, or Dane's Wort, grows only on spots once watered by the Northmen's blood. On some of these spots it certainly grows; as certainly it may be found on others where no other record or relic of Danish presence is

discoverable. To another class in nature belongs the large tawny Roman Snail (*Helix Pomatia*), common upon many spots which have been shown to be Roman sites, and perhaps in some cases a survival from Roman *vivaria*.¹

But of all auxiliaries none is so valuable to the student of earthworks as the sun and the sunshine. Slight inequalities of the surface, invisible to the keenest observer as he walks over the ground, show up from a distance in the sunlight as in a photograph, and take once more their proper shape as the outlines of forgotten enclosures, camps, dykes, individual buildings and settlements. They will still be invisible unless one happens to be in the right place, the sun at the right point in the heavens; and one may walk over the same field, scrutinize the same hill-side, for months and even years, without chancing upon the necessary hour and aspect. So faint and elusive sometimes are these shadows that they vanish as one approaches: they can be located and mapped only by the help of some coadjutor stationed it may be half a mile away, and signalling to the would-be surveyor as he moves from point to point. Vanished mounds and trenches may be rediscovered sometimes only by the help of a growing crop: glancing along the straight-drilled rows of corn one may detect the faint heave or dip of the surface where once ran vallum or fosse, things otherwise too faint to throw even a shadow on the land. In hot seasons the sun will himself execute upon the green turf the very ground-plan of things hidden beneath it, for where there are foundations of stone the grass becomes parched and brown along the lines of building, and churches, castles, villas, and villages are revealed in out-

¹ But it was probably indigenous in some parts of the island. As another curious instance of survival may be mentioned the following. The crayfish is not indigenous to England north of the Thames, but it has been found in a remote beck on the Yorkshire moors, a feeder of the Skell. Undoubtedly it was introduced there by the monks of Fountains Abbey.

line upon the grass. The Roman villa at Blatchington, near Brighton, was discovered by the fact that the crop had but a stunted growth above the foundations. Similarly the mere colour of the soil will betray the presence of such things even upon ploughed fields: where ran a fosse the soil will be deeper and blacker, and black earth may itself be a sign of human habitation.¹

It will hardly be maintained that it is but a narrow-minded hobby which calls for so much alertness, such varied observation, such ready receptivity, as are needful to the student of earthworks. The history of his country at large, and specifically an intimate acquaintance with that of his particular portion of it, some knowledge of anthropology and ethnology, of military science and agriculture ancient and modern, of primitive custom and mediæval manners and methods, of primitive belief, religion, astronomical science and necrology, of numismatics and osteology, of the arts of the potter and the smith and the worker in flint, a little botany, a little geology—all these, and more, are useful to him if they be not all actually needful; and these manifold acquirements he should possess in addition to other gifts which are more essential, viz., a close observation, an indefatigable patience, extreme caution, and sound common sense. At once concrete enough to give an interest to everything, yet sufficiently abstract to satisfy any sane imagination, the archæologist of earthworks might not unreasonably claim that his is the *scientia scientiarum* to which all others are but the handmaids. One power at least it has which belongs to no other, that of bringing the dead to life. In his hands alone lies the power which can re-create the past.

¹ This fact is confessed occasionally in popular nomenclature. "The Black Fields" is the name of the site of a Roman settlement at Alchester; and "Best-leas," the name of a field lying along the line of the Buckinghamshire Grim's Dyke, alludes to the superior quality of the soil which once formed the dyke.

CHAPTER II

CLIMATE AND CULTURE

"Of old sat Freedom on the heights."

*"Well said, old mole. Canst work i' the earth so fast?
A worthy pioneer!"*

PALEOLITHIC man was a hunter. His movements therefore were determined by those of the animals which formed his quarry, and those again were in the ultimate determined by climate. The earliest authenticated traces of Palæolithic Man are found in deposits belonging to the later portion of the Pleistocene period. That period was characterized in Britain by extreme variations of temperature, and great alterations of the land-levels. During its earlier half the climate was seldom, if ever, other than arctic, and the land-level rose, fell, and again rose, until Britain was once more united with the Continent. Thereafter the climatic conditions became less and less severe, albeit the variations of heat and cold continued to be so considerable that the fauna of the period was representative alike of arctic and of southern types. Contemporaneous with these are the earliest known traces of man in Britain, and it is believed that they are the *reliquiae* of hunters who followed one or other species of animal to and from the mainland. There supervened, however, another period of glacial character, accompanied by fresh subsidence of the land-levels, until at the close of the

Pleistocene period Britain was once again an island, and probably much of what is now dry land was beneath the sea.

By the geologist all subsequent times are included under the name of the Recent period. In this the earlier changes were to a great extent repeated; the island gradually rose until it was again continental, and thus the now existing fauna found its way into the country, which, as the climate was simultaneously modified, became densely forested. With the new fauna came *Homo* again—Neolithic Man, whose presence is thenceforward uninterrupted. The connexion of Britain with the mainland was not, however, of long duration: once more, and this time finally, it became an island, and the remains of the forests which were submerged in this final subsidence are to be seen at many points about the coast, *e.g.* in Lancashire, in Bridgwater Bay in Somersetshire, and along the south coast. Partly as a result of this renewed insularity came further diminution in the range of temperature, and the climate became more humid. At the same time the forests of the interior began to shrink, and very gradually their disappearance tended to render the climate drier. In this direction the change has been proceeding slowly to the present time, and although the gradual alteration of coast-levels has not altogether ceased, it has not been sufficient to make any material difference in the map of the island from the geologist's point of view.

Within narrower limits there have nevertheless been very considerable modifications, due partly to another and extremely gradual process of elevation, partly to erosion by the sea. Thus in Cæsar's time the sea came up to Lymne, and the alteration of the coast-line all along the south-east of England is illustrated by the present position of the once prosperous Cinque-ports, many of which have long ceased to have any "business

in the great waters." A precisely similar change has reclaimed to cultivation the whole of the lowlands of Somersetshire westward of Glastonbury, from the Mendips on the one side to the foot of the Blackdowns on the other. A yet more extensive change has been effected in the Fen-districts of the east coast, although man has here had a larger share in the result. Similar alterations have occurred along the coasts of Essex and Kent on either bank of the lower Thames, and on the shores of the Humber, where such names as Holland (*i.e.* Hollow-land) and Sunk Island explain themselves. On the other hand, erosion has very materially altered and still continues to alter the coast-line, on the east especially, evidence of which is to be seen in the Godwin Sands, and in the fate which has overtaken the Roman fortress of Othona (Bradwell), in Essex, and those at Walton-on-the-Naze and Felixstowe, and the mediæval port of Dunwich. But speaking generally, it may be said that no considerable portion of the island is now under water which was *terra firma* in the days of the Roman occupation, nearly 2000 years ago.¹

Of the deforestation of the country there is evidence in plenty; the process has been going forward, whether by reason of climatic change or by dint of human agency, ever since the commencement of the Recent period, but to a very great extent it is actually matter of documentary proof. The traditional names of forests long since vanished still linger in their several districts, *e.g.* Inglewood, Wyre, Elmet, Arden, Charnwood, and Hainault; while in many cases there still remain isolated patches and fragments of the old woodlands, as in the New Forest, Cranborne Chase, Ashdown Forest, Epping, Sherwood, Savernake, and Dean.

¹ The tradition of a submerged Kingdom of Lyonesse, which once stretched from the Land's End to the Scillies, has no support in geological facts, for the subsidence of that area dates from a period immeasurably earlier than the legend requires. The Lyonesse of mediæval romance was in Brittany.

In all these instances, and in many more, the forests were properly so called, and no account is here taken of many other "forests," or "chases," in the Norman sense of royal hunting-demesnes, not necessarily wooded to any great extent or indeed at all, such as were the Forests of Dartmoor and Exmoor, Neroche and Mendip, and the weary swamps about the Don and the Trent known as Hatfield Chase. But in many cases every trace is lost of forests far more extensive and more ancient. Thus the vast Andredesweald, which covered the whole of the Weald of Sussex and much of Surrey, has passed completely out of memory, and so have those which covered most of the counties of Hertfordshire, Buckinghamshire and Berkshire,¹ Cumberland and Westmorland. Writing a few years before the Christian Era, Strabo could still say that "the island was mostly jungle" even on the lower levels. A map of Britain at any date antecedent to the Romans' coming would present only isolated areas of cultivable land of greater or less extent scattered amongst vast stretches of unbroken forest and fen; and the more remote the date, the less would be the extent of open country.²

The climate of a country and its trees are intimately connected the one with the other. Dense vegetation itself promotes humidity, and humidity when excessive destroys the trees which aggravate it; and these as they decay form peat-beds, and give place to the semi-aquatic vegetation of fens. But the very decay of the forests

¹ Buckinghamshire and Berkshire are named from their forests, of beech and of birch respectively. At the present time the sole remnant of the Berkshire forests is to be found in and near Windsor Great Park and Bagshot Heath. Of the forests of Bucks—anciently included in Bernwood Chase—there are remnants to be seen in the beech-woods of the Chilterns between Tring and Wendover, and about Great Hampden; but most of the wood on the Chilterns, at any rate, is of modern planting.

² In J. R. Green's *Making of England* are a number of maps to illustrate the condition of the country in the fifth and following centuries.

tends to diminish the humidity which aided it, while if allowed to go too far it may result, not in the recovery of fresh acres to the plough, but in the formation of pestilential swamps or arid deserts. The outstanding fact is that forests properly so called imply a very moist climate, and there is every reason to believe that the climate of Early Britain was very moist. The forests filled the whole of the lowlands and climbed far up the slopes of the hills. The low-lying areas were entirely covered with jungle, and were for the most part impassable swamps; what are now mere streamlets were then wide and unbanked rivers, broadening out at short intervals into lagunes, tidal or otherwise; and as a consequence partly of the sodden state of the lowlands, partly of the humidity induced by the forests, the rainfall was far greater than it now is, and the levels at which flowed the springs were far higher. It may indeed be stated as a general truth that all over England the water-levels were very much higher than they now are, and the streams more numerous and more copious; so that areas at the present time almost waterless were once abundantly supplied with that necessary of life, if not actually swampy, and that too at no very remote period.

The bearing of these facts upon ancient earthworks is easily made obvious. Earthworks are the signs of human occupation. Where they abound they imply either a numerous contemporaneous population or long periods of occupancy, and *vice versâ*. But in no part of the world have forests ever maintained a large population. It is true that there may have been, and probably was, even to the latest part of the prehistoric age, a considerable population of hunters, who contrived to find a subsistence in the forests and the fens, remaining perhaps, in extreme cases, in a condition of savagery very little removed from that of their palæolithic forerunners. But such a popula-

tion, however large in the aggregate, could never be very dense at any particular spot. The life of the hunter does not admit of dense population, because the supply of game will not suffice for many mouths. Nor does it allow such permanence of settlement as might lead to the construction of earthworks of any great extent, for the game is soon scared off from one locality, and the hunter must needs up and follow it elsewhither. Nor can hunting communities amass wealth: they must either abandon their lower civilization for a higher, or they must withdraw before more civilized peoples possessed of greater wealth and better weapons. The regular path of advance is from hunter to shepherd, from shepherd to agriculturist. But a pastoral life is impracticable in the forest, if not altogether so in the fen, because of the lack of adequate pasturage, and because wild beasts make impossible the safe keeping of herds in such localities. Pastoral peoples must of necessity seek open ground, and those tribes which refuse to do so condemn themselves to continue in the lowest grade of civilization. Progress began with those who first abandoned the traditional life of the hunter, and, coming into the open, devoted themselves to the shepherd's life. It will be found that of all our innumerable earthworks of even the oldest types, the most and the finest stand in what was probably open country. Such exceptions as occur for the most part admit of some explanation. On the other hand, those areas which are known to have been more densely afforested in earlier times are markedly lacking in earthworks, and particularly in earthworks of great size;¹ and the same remark applies to those tracts which are known to have been fen.

¹ Thus Rev. S. Baring-Gould has remarked that there are no camps on Dartmoor, although immediately outside the Moor lie thirteen of various types. Exmoor again, while it can show a considerable number of camps of various types, has not a single really fine one. Yet Exmoor probably had a large population in primitive times, and Dartmoor unquestionably sustained a very large one.

As compared with the life of a hunter, that of a shepherd is a settled one. Where the conditions allow of it, he may move hither and thither within strictly narrow limits, from the hill to the plain and from the plain back to the hill according to the seasons, or where the area of open ground is wide enough he may wander as freely as the Turcoman. But in Britain there was no such scope for his wandering. The open country was of very limited extent, dense forest separating one stretch of pasture land from the next, and the natural growth of population must have speedily occupied such areas as were available, the more so as pastoral communities require for their maintenance a relatively large extent of ground, and that ground of a certain quality and character. The tendency would be from a very early date for the pastoral tribes to make permanent settlements. Moreover, this would be done the sooner because of new dangers begotten of new facts: the herds of the tribe would be a constant temptation to wild beasts, and the forest, nowhere very remote, harboured numbers of wolves as well as other predatory animals. Common sense would speedily lead to the construction of folds adequate for the protection of the herds at night-time, and these would naturally be constructed at the points furthest removed from the forest, *i.e.* upon the tops of the open hills. But the herds would be equally a temptation to the hunter tribes of the lowlands, as well as to other shepherd tribes of the hills, and the practice of cattle-lifting would increase as the population became more numerous. It was therefore the more desirable to select permanent sites which could be fortified alike against wild beasts and against man. If there are many earthworks of a character so slight that they might be thought to have been erected simply as a defence from wolves, there are many more which were as obviously constructed against adversaries far more formidable.

A mere stockade might, with reasonable vigilance on the part of the owners, suffice to safeguard the herds from the most venturous of wolves, but never yet were wolves so dangerous and so desperate as to call for the erection of such elaborate works, doubly and trebly and even quadruply entrenched, as are the great hill-forts of Wiltshire and Dorsetshire. These must, without any question, have been built to meet the attacks of man, and must be, therefore, military works. To suppose that primitive men dug fosses and raised valla¹ where a mere hedge would have sufficed to keep the wolf out and his oxen in, is to credit him with a degree of energy which his species has never developed from that day to this. Man never does, and never did, more work than he must, albeit he frequently does less than he ought.

There is no question that the hill-top camps are, as a class, the finest and the most elaborate of all. From what has been said it would follow that some of them are also amongst the oldest, and so far as they have been examined this appears to be the fact. It would, indeed, be quite reasonable to argue that their very size, strength, and elaboration are rather proofs of their having been built at a later date, when the builders had become numerous, wealthy, and experienced; but in view of the evidence it must rather be maintained that these characteristics are the result of the continued labours of many generations, or even of many centuries. In the slow process whereby wider and yet wider tribal combinations took the place of the older and smaller units, the tendency would be for certain positions to grow in importance as others dwindled; and as its importance increased, more and more effort would be expended upon strengthening the central fortress. Nevertheless, it is a curious fact that

¹ If this unclassical form requires apology, the writer hereby apologises
Its convenience must be its excuse.

few, if any, of the greatest camps show any traces of enlargement, although the original defences may very likely have been improved and strengthened, the vallum raised and the ditch deepened, new valla and new ditches perhaps added. One thing is certain; so long as the same conditions of life continued, the same forms of fortification would be employed, quite irrespective of race; so that new tribes may have fought their way into the desirable areas, and dispossessed the older occupants, without any material modification of the earthworks there found. They would naturally occupy the camps of the conquered very much as they found them. So long as the uplands remained the desirable areas, so long would the old type of earthwork subsist. This would alter only when the conditions of life altered, that is, when the forests began to be cleared and the lowlands began to be reclaimed. And this would not be done until advancing civilization brought with it the practice of agriculture.

It is necessary to emphasize the fact that, so far as our knowledge at present goes, it is not possible to establish any connexion whatever between differences of race and differences of type amongst the hill-fortresses, or indeed amongst any earthworks prior to those of the Romans. Endless harm has been done to genuine archæology by fanciful theories of this kind, as, for example, by that which would airily divide all "camps" whatever, irrespective of other considerations, into round, rectangular, and oval, and would maintain all round ones to be British, all rectangular to be Roman, and all oval to be Danish. It is not needful to say more against so baseless a theory than that it does not agree with the evidence, and if it did, it is not exhaustive either of the camps or of the races of the land—makes, for example, no provision at all for the poor Saxon, who has nevertheless outlived Briton and Roman and Dane alike. So far as we know, the first people in this island to adopt even theoretic-

ally a uniform and distinctive type of fortification were the Romans, but even the Romans' work was neither so uniform nor so distinctive as to eliminate all chance of error. Thereafter it is possible to make a like predication of the Normans, and the mediæval moat is likewise a well-defined type of fortification characterizing a determinate civilization. But of the peoples who inhabited the island before the Romans' time no such determination can at present be made, nor is it likely that any existed. If the question should be raised whether, for example, the Iberian Longheads did not practise a different system of fortification from their Round-headed successors, the answer is that we do not know. Possibly some of their earthworks are incorporated in camps reconstructed by the later races, and possibly some of these camps may even be practically unaltered specimens of Iberian work. It rests with the spade to add anything further to this bare statement.

The fact that the camps of what Cæsar calls the *ora maritima* are as a class so much finer in plan, and so much better preserved, than those of other parts of England is capable of explanation. The hills of this part of England are almost entirely chalk, and while chalk is much more easily worked than harder rocks, it is also a peculiarly adhesive material, resisting with great obstinacy the forces which make for denudation and wastage; and as throughout a very large part of the country the chalk lies so near the surface as to offer few attractions to the ploughman, there has not been brought to bear upon these earthworks the same amount of purposeful destruction as has elsewhere wrought so much havoc. These considerations, *inter alia*, account for the better preservation of the camps of the chalk-country. Their finer plan is due, in the first place, to the fact that upon these chalk-hills were collected the first and the most of the pastoral tribes, and the wealthiest. There is reason to think that the chalk-

downs were very early clear of forest ; indeed, it has never been proved that they were ever afforested at all to any great extent, except where, as in Buckinghamshire, there was a considerable capping of more fertile soil above the chalk. In the second place, those hills furnished better pasturage than is to be found on most uplands, as the modern sheep-farmer can testify. At the present day it is remarkable how rarely one sees cattle grazing upon the uplands of Exmoor, Wales, or Yorkshire, and not even the wide chalk-ridges of the Wolds can compare with the South Downs as grazing ground. In the third place the *ora maritima* was most conveniently situated to enjoy the benefits of trade with the Continent, and that such trade existed, and was even considerable, there is no question. Communities grew in prehistoric times, as they now grow, by trade, and there can be no reasonable doubt that such great fortresses as Cissbury, Maiden Castle, and Dolebury owed their grandeur largely to their advantages in the way of trade. The comparatively small size of other camps of the South Downs as compared with Cissbury may seem inconsistent with this statement, seeing that they lie nearer to the Gallic coast than do those of Wiltshire and Dorsetshire ; but the explanation is that the narrow configuration of the South Downs prevented any great increase of population or of cattle, and that such wants as the population felt were adequately provided for by the central mart of Cissbury. While therefore fortresses like Maiden Castle, Badbury, Sarum, and Dolebury enjoyed each a central position and commanded the trade in all directions equally, the geographical character of the Sussex Downs—a mere bank of chalk running from east to west, and completely shut in between the sea and the impassable Andredesweald—compelled all overland trade to follow one route, the route which Cissbury commanded ; and a single trade-route can make opulent but one settlement, unless its benefits are to be distributed

amongst all that line it without special advantages to any one of them.

No date can be given for the change from the pastoral to the agricultural stage. Great changes are not quickly effected in the life of a people even in these days of startling innovations and systematized education. There is no reason to think that matters moved more quickly in prehistoric times, but rather the reverse; so that the chain whereby the first accidental experience of the possibility of plant-culture was linked to the fully developed practice of corn-farming may well have been infinitely long. At the one end is the probability that neolithic man knew, on his first appearance here, nothing of these things; at the other end is the assertion of Pytheas that in the fourth century B.C. considerable areas of land were under corn. The Britons had in the interim travelled a long way up the road of progress, and it is likely that the journey was a slow one.

Pytheas expressly declares that the corn-lands which he saw were near the coast. Thus by the fourth century B.C. the lowlands had come under cultivation, at least in some places. Of the people who formed these agricultural communities he tells us nothing, and there are two possible alternatives: either they were the descendants of the peoples who had built the hill-forts, and had moved down from the hills in search of more desirable soil; or they were new immigrants from the Continent. Perhaps Cæsar's words, quoted above,¹ may be taken as favouring the latter view, for he expressly says that the inhabitants of the interior, who presumably represented the older tribes, practised little or no agriculture. On the other hand, he admits that some of them knew something of it. Very possibly the majority of the farmer-population were

¹ See pp. 4, 5.

Gallic or Belgic immigrants, who would find along the east coast and in Kent exactly the land they required, and would therefore settle there at once, only later extending westward along the south coast and into the southern Midlands. The previous occupants of these areas, whether they withdrew before the new-comers or remained to amalgamate with them, would in either case learn something of the new method of life, and would gradually as opportunity offered put it into practice. The process of reclaiming the lowlands from the forest must, however, have been extremely slow at first, and can have made but little headway at all until the introduction of iron. The stubborn persistence of genuine forest is well illustrated by the slowness with which the Saxons made good their conquest of the Sussex Weald; yet the Saxons were a farmer-folk long familiar with the use of iron. Earlier and feebler folk must have been content to cultivate mostly the open uplands, only by the very slowest steps making their way down the combes towards the lowlands.

Traces of this cultivation of the hills are recognizable in the terraced formation of many hill-sides in every part of the island. These terraces (variously called *linces*, *lynches*, *lynchets*, or *lancharde*¹) are in some instances unquestionably due to artificial means such as ploughing, and there are instances known in which are still traceable the retaining-walls constructed to uphold them; but in other cases it is by no means certain that they are the result of agriculture, or even artificial at all. In every case their date is a matter of the greatest uncertainty. They are abundantly scattered over most of

¹ Of the various names and spellings, *lancharde* seems to be the most correct, if the derivation from *land-scear* (land-shear) is the true one. This etymology admits them to be the result of ploughing, and something is said of this in a later chapter (p. 634). An alternative derivation is from A.-S. *hlinc*, "bank," *sceard*, "share" or "portion."

the chalk counties, one of the most striking examples being under the great earthworks of Battlesbury Camp, near Warminster, where a series of thirteen boldly defined terraces covers the whole of the northern side of the hill. Less remarkable examples occur in the South Downs near Mt. Caburn and Cissbury and Telscombe, in Buckinghamshire on the Chilterns and at Cheddington, and along the downs about Hitchin, Dunstable and Royston. Amongst the Northumbrian hills and in Wales they are very common, and in the Scottish Lowlands more abundant still. At Romanno, Peeblesshire, is the remnant of a series which originally extended for a distance of a mile and a half continuously. On Heale Hill, Wilts, on certain Welsh hills, and perhaps elsewhere, are to be seen plough-marks of similar origin, running, not horizontally as in most cases, but vertically from the valley to the hill-top.

There are undoubted cases where the deliberate scarping of a steep hill-side by way of fortifying its summit has resulted in the formation of such terraces, *e.g.* at Brent Knoll, Somersetshire; and in other instances it may be that the terraces were formed simply to provide level space for the huts of the community.¹ But in very many cases there is discoverable no trace of any settlement or camp in the vicinity, so that it is impossible to be sure they were always constructed for defensive purposes; and although some of them may be purely natural effects, the results of the action of water in very remote periods, it is impossible to explain all of them in this way. Many, if not most, of them are certainly the result of man's agency, but often perhaps rather accidentally than with intention. Some of them may be of high antiquity, but probably the greater number are not of a great age. As late as the 17th, and

¹ Dr. Christison describes the terraces which cover the sides of the Herefordshire Beacon as "resembling the streets of a town."

even the 18th century, the Scottish farmers¹ preferred to cultivate the hill-sides rather than the valleys, and though the practice was then so little known in England as to excite the astonishment of southern visitors, yet it had certainly been practised there too at an earlier date. The Saxon preferred it for the very same reason as did the Scot, because of the labour involved in clearing the more inveterate forests of the lower ground, and because of the swampy character of the valleys. There is no doubt that all but the very summits of the highest Downs² were early ploughed, and the lynchets must in many cases be of mediæval, if not of Saxon date. Still there is no proving that the earlier Britons did not do the same, albeit on a less extensive scale. If the thin soil of the chalk-hills was sufficient for such superficial cultivation as the Saxon used, it must have sufficed for the Britons, especially when the water-levels were so much higher than now; and if the hill-tribes cultivated the chalk uplands at all, natural forces would bring about the same results as they now produce wherever a chalk slope is ploughed. For various reasons the plough has mostly abandoned the

¹ "It was because of the numerous mosses and waters of the flat country that the slopes of the hills were so generally cultivated by the Scots, a custom which Southern visitors regarded as one of the peculiarities of our remarkable country. Long after the time of Mary an Englishman thus refers to the custom: "'Tis almost incredible how much of the mountains they plough, where the declensions, I had almost said precipices, are such that to our thinking it puts them to greater difficulty and charge to carry out their work than they need be at in draining the valleys.'" The quotation is from *Scotland in the Days of Queen Mary*, by Prof. P. Hume Brown, p. 13, and the Englishman referred to is one Thomas Morer, who visited Scotland in 1689.

² Every one is familiar with the marvellous terracing of the hills of the Riviera for the cultivation of vines and olives. But the same terraces, no longer cultivated, are traceable upon mountain slopes far higher than any now in use. They date from a time (not so very remote) when the lower slopes and the valleys were still thickly wooded, and the upper slopes were in consequence less arid. The deforestation of the country has now gone so far as to make the question of water-supply increasingly serious, and the drier the soil becomes, the less high can terrace-cultivation be carried,

Downs at the present time : modern farming, taxing the land more heavily, requires a deeper soil, and finds the uplands more profitable as grazing-ground than as arable ; the increasing dryness of the climate and the exhaustion of the springs have diminished their fertility ; and the transference of the population from the hill-tops to the lowlands, a transference which was completed by the Saxons if begun long before, has left the higher ground in many cases too remote from the homestead.¹

The practice of agriculture would entail a certain amount of fencing, but the enclosures would be of very small size, mere patches of ground no larger than those to be seen to this day in the wilder and poorer parts of the country. Whether the pasturage was likewise fenced is doubtful, for the areas to be enclosed would be very much more extensive, and the labour correspondingly greater. Such fences as were constructed would be of slight character, mostly mere low banks of earth and stone crowned with stakes or thorn-fencing, but without the great fosses which accompany the valla of fortresses. They would therefore rapidly disappear. Such banks are traceable over many parts of the Downs where modern methods call for no fencing, and must therefore be of some antiquity, but how old it is seldom possible to suggest, and there is mostly no means of determining the question. Large areas of Exmoor, again, now given over entirely to the forest and the red-deer, or parcelled

¹ The origin, and the wide prevalence, of hill-farming are discussed in G. L. Gomme's *Village Community*, ch. iv., where are collected a great number of examples, analogies, and authorities. The point insisted upon here is that, while some lynchets may be very old, most of them are probably very recent. Even where, as at Battlesbury and at Cissbury, they are found in immediate connection with earthworks of unquestionably prehistoric date, it cannot be assumed as proved that they are coeval. At Battlesbury the great fosses of the camp are in part under plough at the present time, and other parts have obviously been ploughed in times past. Not a few lynchets so-called are merely the vestiges of old cartways about the Downs. See further, ch. XVIII.

out by enclosures covering hundreds of acres, are seamed in all directions by the shrunken remains of older fences marking enclosures upon a much less ambitious scale. At Old Burrow, North Devon, these banks radiate from the actual vallum of the camp, and speak of a time when the whole hill was diligently cultivated or grazed, although to-day all signs of such cultivation have long ceased, and the only flocks are those of unfenced sheep. There is no doubt, however, that these remains are of quite late date, and the same is probably true of similar remains elsewhere. That they seem in many instances to be actually connected with earthworks of admittedly prehistoric age merely follows from the habit of taking such well-recognized land-marks as starting-points in the partition of the ground. Camps and barrows have served this purpose throughout the centuries, and the existence of the smaller field-banks in such localities rather proves the antiquity of barrow or camp than *vice versâ*. The same is probably true, with greater reservations, of the more imposing earthworks such as Wansdyke and Bokerley Dyke, where these are found in connexion with camps. Upon the bare, treeless, and otherwise featureless surface of wide uplands, old mounds and fortresses, from their permanent and conspicuous character, were the obvious and the only landmarks to select.¹ Many of the smaller banks also which now divide the areas of large camps are doubtless of relatively modern date.

The converse practice of utilizing part of an ancient earthwork as a modern fence has been responsible for much destruction. Of the fine circular hill-camp at

¹ Amongst scores of instances of the utilisation of barrows as landmarks may be cited that of Money Hill, in the parish of Goodmanham, E. Riding, which derived its name "from the fact that, forming a conspicuous object as the boundary-line of two estates, when the boundaries were perambulated, money was scrambled for on the spot, in order to impress the better upon the memory of the persons assembled the limits of the manor." (Greenwell and Rolleston, *British Barrows*, p. 329.)

Bathealton, Somerset, scarcely fifty yards of the perimeter remain in fair preservation, while for some hundreds of yards the vallum has been incorporated in a modern fence, trimmed, pared and altered to suit the taste of the farmer, until it bears no resemblance to its original shape. Occasionally this modern utilization is thus far a thing to be thankful for, in that it has preserved the outlines of works which must otherwise have vanished completely. This is said to be the case with many of the Devonshire pounds, which have been adopted unaltered as "new-takes" from the surrounding waste of Dartmoor, and simply passed under the plough.¹ But as a rule the passion for severely rectangular fields quarrels with the less regular shape of the ancient fortress, and the works are deliberately levelled to be replaced by hedges and ditches of the regulation pattern. The ring-work at Heathfield, Sussex, is an instance. A few camps, Roman or otherwise, have been saved by their rectangular plan, surviving as fields and orchards, with perhaps no further modification than the construction of cross-fences if their area be large. Camps of less regular construction have, however, very often been planted and turned into game-coverts. The trees are a nuisance to the archæologist: they prevent any satisfactory view of the whole work, often even any accurate measurements, their roots play havoc with the ramparts, and their falling leafage fills up the ditches; but all the

¹ Occasionally the lines of a camp, like those of a Grim's Dyke or a Roman road, have been taken to mark parts of the boundaries of a parish or a county. Principally upon evidence of this kind—the peculiar plan remaining, of course, long after all trace of fosse and vallum has disappeared—Mr. Montagu Sharpe has quite recently endeavoured to reconstruct what he believes to be a lost *Roman* camp at Brentford. The so-called "Roman camp" on Muswell Hill, near Brill, is another instance (p. 313). Near Hampstead Norris, Berkshire, is a hill with the significant name of Oareborough. "No signs of earthworks appear to be visible now on the hill, nor have any been described in earlier works, but . . . the parish boundary makes a very marked detour to include a square piece, which is known by this name (Oareborough)." (H. T. E. Peake in *Vict. Co. Hist. Berkshire*.)

same they serve to protect from the plough old sites which would otherwise receive worse treatment.

The camps and earthworks of the lowlands are for the most part of types different from those of the hills. To the lowlands belong most Roman camps, the moated mounds and mount-and-bailey fortresses of the Norman type, and the domestic moat; and less commonly do they show works of the types usually referred to pre-Roman times. Considering how rapidly and completely the last traces of an earthwork may disappear from a surface under cultivation, it is not wise to lay too much stress upon this: the camps may conceivably have been there once, if not there at the present time; but when such lost earthworks are by happy accident brought to light again they usually prove to be ring-works of the very simplest type, as, *e.g.* at War Ditches and at Wallington. It is, however, scarcely credible that works upon such a scale as those of the Wiltshire and Dorsetshire Downs could have in every case so totally vanished as to leave not a wrack behind, had they ever existed upon the lowlands. The same good fortune which has spared so many of the moated mounds and so many of the dykes, must likewise have spared at least a few of the more elaborate works of even earlier date. But it is a fact that those which are to be found at the lower levels or which may be traced even by rumour and tradition only, are relatively few, small, and weak.¹

Probably few of the southern counties of England have suffered less alteration of their general condition and map during the lapse of centuries than has Sussex. At the time of the Norman conquest Sussex was still almost wholly covered by the prehistoric forest of Andredesweald, which is known to have persisted for long centuries later, and which has not altogether vanished at the present day.

¹ The view that the great earthworks of *e.g.* Norwich Castle, Castle Acre, and Castle Rising were originally British constructions subsequently occupied by the Normans, is not capable of proof.

The only portion of the county—its total area is 1464 square miles—which was not forest was that lying south of the northern scarp of the South Downs. The forest was therefore upwards of five times as extensive as was the open country ; yet whereas the Downs can show the remains of at least twenty-five camps of pre-Roman character, in the whole of the forest area there are to be found only two camps attributable to the same date, and this too although the ridge of high ground which traverses the middle of the county from east to west, attaining in several places a height of more than 500 feet, was exactly such as the ancient population would have occupied if the forest had allowed it. The two exceptions are the feeble camp at Saxonbury near Rotherfield, and the merest vestiges of another at Heathfield.¹ Yet this was an area close to the thickly populated Downs, abounding in iron which was already worked in Cæsar's time, and only less well placed than Kent for communication with the Continent. It is to be noticed also that both the existing camps are of the very simplest type, mere ring-works of no great area, defended only by a single vallum and a single ditch of small dimensions. It seems a fair inference that the more formidable types of fortresses found upon the hills were not as a rule transferred to the lowlands, and that the lowland forts are of a date later than those of the hills. It will be found further that such camps of pre-Roman date as are to be found in the lowlands are almost all of the simplest circular type, frequently no more than large cattle-rings ; and that this is the prevailing type to be found in all areas which are known to have been persistent forest. Yet if, as Cæsar declares, this was the principal iron-mining region of the island, and its population was very dense, it is obvious that the condi-

¹ It has not been actually proven that either of these is a pre-Roman work, but for the sake of the argument let us allow that both are such. Lingfield Mark Camp, certainly pre-Roman, is in Surrey.

tions in his time were no longer those which had called for the tremendous defensive works of the hills : in other words, that the primitive state of war was past, at any rate in south-eastern Britain, which was inhabited by a people or peoples who had less need of elaborate defences, and enjoyed in general a peaceful and settled life of commerce, industry, and agriculture.¹ And there is very good reason to suppose that they had enjoyed such a life for a long period. Such a construction as Stonehenge, for example, not to mention the yet older and in some ways finer work at Avebury, implies a very considerable population living in a settled condition of peace, united in the observance of one widely recognized cult, and accustomed to combine for common action under the direction of some recognized authority. It is not mere accident that these two great monuments of the Britons stand upon Salisbury plain, the widest area of unforested upland which the *ora maritima* could show even as far back as the Bronze Age.

It is not suggested that in no case are simple circular camps of any great age. There are some upon the hills which may very well be amongst the oldest, but in the case of hill-forts the circular shape is usually an accident due to the contour of the hills which they occupy. But even on the hills the round camp is sometimes demonstrably later than others of less regular design. Cissbury, for instance, which is probably one of the very oldest of the Sussex camps, as it is the largest, is not circular. Mt. Caburn camp, on the other hand, which Pitt-Rivers proved to be Late-Celtic, is strictly circular and very small, whereas the almost obliterated camp on Ranscombe Hill, only half a mile away, which the same explorer observed to be far earlier, was neither circular nor small.

¹ So Diodorus Siculus (v. 21) : "for the most part they live at peace one with another."

Pitt-Rivers, indeed, after examining certain rectangular camps in Cranborne Chase, went so far as to suggest that perhaps all camps of the Bronze Age were of that type, a proposition which is quite untenable. The case of Mt. Caburn proves that the hills did not altogether cease to be occupied when the lowlands came under cultivation, but it suggests that henceforward the population of the hills was relatively small and poor, requiring but small earthworks to accommodate it.

That war should occasionally, even frequently, disturb this otherwise peaceful population, was of course inevitable, and Cæsar tells us that they provided for such an emergency by the construction of fastnesses in the forests. One of these he describes as "situated in the woods, in a spot naturally strong, and further strengthened artificially by the felling of large numbers of trees so as to block all the approaches";¹ and he adds that it was "seemingly constructed with a view to tribal wars" before his invasion, and not expressly to meet that menace. The fact that his legionaries were compelled to employ for its reduction the laborious method of the *agger*,² shows that it was a formidable fortress, and probably implies the existence of a large ditch. Elsewhere³ he says, speaking of what he calls the *oppidum Cassivellauni*, commonly identified with the modern St. Albans, that "an *oppidum* with the Britons is a place amidst dense forest, fortified by a rampart and a ditch, whither it is their habit to assemble to escape an enemy's raid." He lays stress upon the manner in which this *oppidum* of Cassivellaunus was protected not less by artificial defences than by the surrounding swamps and forests. It was big enough to shelter a great number of people and of cattle, too big to be surrounded by his force of four legions only, so that most of the occupants

¹ B. G. V. 9.

² See *infra*, p. 159, note.

³ B. G. V. 21.

made good their escape when the legionaries finally rushed it at two points.¹

Both Cæsar's descriptions refer to one type of stronghold, which was obviously a purely military work not used for permanent occupation,² at least by any large portion of the tribe. The occasional appropriation of the term *oppidum* to signify a fortified town in permanent occupation, as distinct from a camp of refuge, is not therefore warranted by Cæsar's language,³ which points to a people who, under normal conditions, lived in the open "in huts precisely like those of the Gauls." The camps at Ambresbury Banks and Wallbury in Essex, at Cholesbury in Buckinghamshire, and at Lingfield in Surrey, are possibly such *oppida*. To walled towns in Britain, Cæsar makes nowhere any allusion, neither those "shapeless buildings of undressed stone" such as Tacitus⁴ speaks of as characteristic of the hill-country of the west, nor those much more ingenious works of timber and stone which gave to Cæsar⁵ so much trouble in Gaul.

¹ If Mr. Montagu Sharpe is right in his attempted restoration of the original plan of the lines at St. Albans (*Archæologia*, vol. xxii.), they enclosed a very large area indeed, with a circuit of several miles. Some of the defences to the west of the river are apparently incorporated in those of the Roman Verulamium, but at the north-east extremity remains an enormous fosse nearly a mile in length, now utilised for a rifle-range, and apparently part of the original defences. The lines at Lexden, immediately west of Colchester, cut off a peninsula lying between the Colne and the Roman River, upwards of 20 square miles in area. There were originally three parallel lines of vallum and fosse, but the existing remains are mere fragments of perhaps $1\frac{1}{4}$ miles in length from north-east to south-west.

² *Cp.* Strabo (§ 200): "Their only towns are the woods. In these they ring about a spacious circular area with felled trees, and therein build their huts and stall their cattle, but for no long period."

³ Dr. T. Rice Holmes (*Ancient Britain*, p. 258) attempts to show that Cæsar distinguishes the *oppida* from camps of refuge, using *castella* for the latter; but his references apply not to Britain but to Gaul, as he admits, and even so it is doubtful whether the distinction can be maintained.

⁴ *Rudes et informes saxorum compages*, Ann. xii. 35.

⁵ See below, p. 176, note.

CHAPTER III

PROMONTORY FORTS

*“ . . . Men yet scarcely conscious of a care
For other monuments than those of earth ;
Who, as the fields and woods have given them birth,
Will build their savage fortunes only there ;
Content if fosse and barrow and the girth
Of long-drawn rampart witness what they were.”*

PROMONTORY forts constitute the first class in the Schedule of the Committee.¹ From the definition it might be thought that they must present but small variations of position or of plan, and that one or two examples might serve as types of all. No mistake could be greater. Earthworks of this, as of all other classes, display the endless variety and individuality which are amongst the first charms of the study of earthwork. Even if the general plan be frequently much the same—and from the definition this is bound to be the case—yet each new instance presents its own special features of interest, its own peculiar problems, its own particular topography and scenery. The trite *ex uno disce omnes* does not apply to camps, for every one is unlike every other.

Promontory forts are all alike in occupying the extremities of headlands, spurs, or peninsulas, and

¹ For their definition, see p. 21.

in relying for defence chiefly upon the natural features of their position. That part of them which is artificial, be it larger or smaller, is always subsidiary to that which is natural; but the artificial additions may be only a few yards in extent, or may form more than half the entire circuit of the fortress. Built of any sort of material, the artificial defences may vary from the slightest vallum to the most formidable, and from one vallum only to as many as half-a-dozen. Such camps differ in area, in shape, in the disposition and the defences of their approaches. Even their natural features admit of wide variations. Sometimes these are merely steep slopes or more abrupt precipices. Sometimes there is neither precipice nor slope, and the only protection is that afforded by sea, river, marsh, or bog. There are instances in which the promontory fort becomes, or used to become, an actual island, at least for certain hours or seasons; others where it never sees, and apparently never did see, standing water. All that was essential was a space of ground of sufficient size, protected as far as possible by its own natural features. The less the labour needed to supplement these natural defences the more nearly the fortress approached the ideal.

The ideal, therefore, is a spacious level area of land standing up sheer and harbourless out of deep water, and accessible only along a narrow isthmus. Such positions, rarely to be found except upon very irregular coasts, are numerous in Cornwall, along the coasts of Wales, in Scotland, and in Ireland. The term "cliff-castles" exactly describes them. Tintagel, rising abrupt as a wall some 300 ft. out of the Atlantic on one of the most dangerous of all our coasts, answers the requirements perfectly; and so also in a less degree does Portland Bill; but any earlier fortress which stood on either of these points has been obliterated by sub-

sequent occupation. The oldest portion of the ruins of King Arthur's Castle of Tintagel is a Norman keep, while the whole appearance of Portland has been altered by modern fortification and by incessant quarrying. The Cornish coast can, however, show numbers of such "cliff-castles" in more or less good preservation.¹ Black Head near St. Austell, The Dodman, Cuddan Point, Rame Head, Trevarrian, Bedruthan and Parkhead are amongst them, the finest of all being Treryn Castle and the most elaborate Trevalgey.

Treryn Castle, or Dinas Treryn, "the Fortress of the town on the Headland," some eight miles from St. Buryan, is a tumbled pile of granite jutting out into the sea between Treryn Cove and Penberth Cove. The headland, which reaches a height of some 250 ft., and boasts the famous Logan Stone of Treryn, is cut off from the mainland to the north by a triple line of entrenchments of very irregular disposition, still rising in places to a height of 15 ft. The place has no history, but the neighbourhood abounds in remains of the prehistoric time, such as the Fougou of Trewoofe, The Pipers, and The Merry Maidens, which suggest that to the same period belonged the people who made their stronghold here.

Trevalgey Head (Fig. 1), 2 miles east of Newquay, Cornwall, is in reality an island, severed from the mainland by a chasm some 20 feet or more in width, through which the tides of the Atlantic at times come spouting up as through a "blow-hole." The approach to this chasm is covered by no less than four successive lines of banks and ditches, three lying closely parallel at the very edge of the cliff, while the fourth and outermost makes a wide sweep so as to include a considerable area. This outer bank was not more than 8 feet in height, but the three inner valla reached the height of 10, and in one case 20 feet, and the dividing ditches

¹ J. B. Cornish enumerates twenty in *Victoria Co. Hist. Cornwall*.

were 10—12 feet across. Beyond the chasm, which measures perhaps 50 paces from end to end, lie three other lines of defence: that at the edge of the cliff was a vallum 20 feet in height and 30 feet in thickness; the next, some 40 yards behind it, is still 12 feet high on the outer side.¹ The irregular space within the third and last line, measuring 250 by 200 yards at its extreme points, is littered with flint chips, but bears no traces of occupation of any later age. Within it is a considerable mound, and

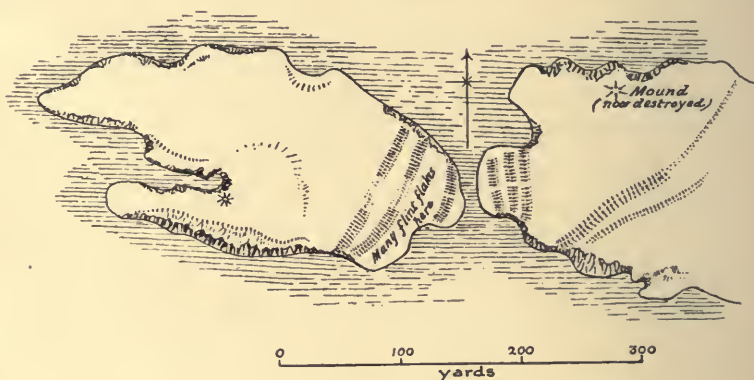


FIG. 1.—TREVALGEY.

there used to be another within the outer precinct on the mainland.

In a position little less defensible may be mentioned, amongst Welsh examples, the camp on St. David's Head, known as Clawdd y Milwyr, *i.e.* The Warrior's Dyke. Here a small rocky peninsula is cut off by one great wall of dry-built stone, estimated to have stood as much as 15 feet high, and to have been 10—12 feet broad at the base. In front of this is a shallow fosse, the ground being too rocky for much quarrying; and beyond this again a second and a third *sangar* of loose stone, each covered by

¹ The figures given are those of W. C. Borlase in *Archaeologia*, xlv (1871). The works are less impressive now than they then were.

another very shallow trench. The single entrance-way was a sort of causeway 12 feet in width, narrowing to little more than 7 feet where it passed the walls. The flat slabs of rock which lined the passage are still in place. The whole length of the fortifications is barely 250 feet. Within the area are the ruins of some half-dozen circular huts, and upon the mainland without are the scattered traces of enclosures, circular and rectangular, which would seem to indicate that the inhabitants

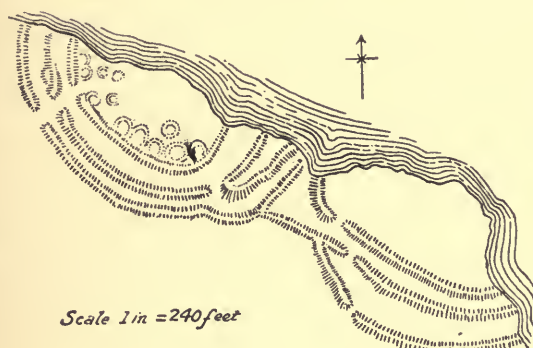


FIG. 2.—EARNSHEUGH.

practised some rude sort of agriculture besides keeping cattle. Exploration showed them to belong to the Iron Age, but whether pre-Roman or post-Roman is indeterminate.¹ Other Welsh examples are Great Castle Point, Dale, with a fine double vallum; Dinas, 4 miles from Fishguard, where a sufficient defence was obtained by simply scarping a kind of natural fosse across the neck of the headland; Old Castle Head, Manorbier; Wooltack Point; and two near St. Govan's Head. Amongst many Scottish examples Dr. Christison² describes an unusual double fortress at Earnsheugh, west of St. Abb's Head (Fig. 2),

¹ See a report by Rev. S. Baring-Gould in *Archaeologia Cambrensis*, vol. xvi., 5th Series (1899).

² *Early Fortifications of Scotland*, p. 130.

further interesting because of the presence of a number of hut-circles within the principal area. The Irish examples, which are very numerous, have been dealt with by T. J. Westropp.¹

Such advantageous positions as those of Trevalgey and Clawdd y Milwyr are the exception; the majority of coast-castles more resemble the fort at Earnsheugh, where the sea defends only one side of the whole work. In very many cases the forts of this type have so suffered from the crumbling of the cliffs that it is impossible to recover

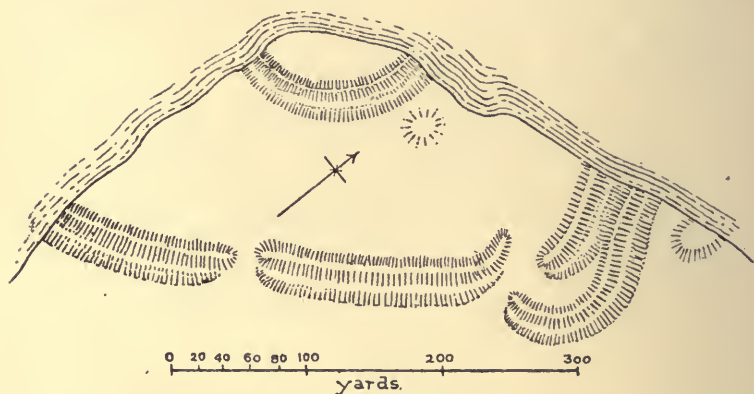


FIG. 3.—EMBURY BEACON, WELCOMBE, DEVON.

their original plan. At Embury Beacon (Fig. 3), for example, on the north Devon coast, 5 miles south of Hartland Point, it is evident that some portion of the works has been demolished by the sea, for there remains no visible means of access to the inner enclosure. As to the age of this fort there is little evidence; the wide interspace between the inner and outer ceintures is a feature not uncommon in hill-forts of the West Country of undoubted British age, but it is found also in many much later works. In the cases of the south-coast camps such as Beltout (p. 673), Seaford (Fig. 220), and Abbotsbury

¹ *Ancient Forts of Ireland*, in *Proc. Royal Irish Academy*, xxiv, etc.

Castle, there is no question that the works are pre-Roman, and that they were once much more extensive than now; but whether they were originally promontory forts, or are only the remains of contour-camps once fortified all round, is a question which can never be decided. The camp at Shoebury (Fig. 115) seems not to have suffered from erosion at all.

The history of all these cliff-castles is unwritten. It needed no special genius to see the fitness of such positions for defence, and it is in no way remarkable that they should therefore have been fortified. The same quickness to seize upon suitable sites is to be seen in countries as far afield as Greece and the mountains of south-eastern Russia. In Brittany there are many and some very fine examples. In themselves they convey no hint whatever of their age; they merely bespeak a population to whom, at whatever date, the more low-lying and inland portions of the country offered no sufficient security.

Cæsar describes¹ the difficulty he found in dealing with the cliff-castles of the Armorici, that Celtic population which subsequently gave shelter to their refugee kinsmen who fled from Britain to escape the Saxons, and brought with them to Armorica its present name of Brittany. Some of these forts, of Brittany at any rate, are therefore older than the British exodus, and it is probable that some of the English examples are equally old. The actual site of which Cæsar speaks has been conjecturally fixed at Mont St. Michel; this is doubtful, but it was obviously a fortress to which the receding tide left very practicable means of access, and therefore not upon a very rocky and unapproachable coast. Such a fortress as Trevalgey, and still more so Treryn Dinas, can scarcely at any time have been accessible by sea, so that the theory

¹ *B. G.* III. 12, &c.

which attributes the cliff-castles to invaders from the sea, with due allowance for the reckless hardihood of Saxon and Dane, can hardly apply to all of them, though it may possibly be true of some. G. T. Clark attributed to the Danes many of those found upon the Welsh coast, and it is certain that the Danes did upon occasion build promontory-forts,¹ but they were not more likely than a modern mariner to court the perils of the terrible coast of western Cornwall. In many instances these fortresses must have been the work of native islanders, Cornubii, who practised under the same conditions the same methods as did their kinsmen the Armorici. Where there is any evidence at all, the flint flakes, implements, and pottery bear out this view. Again, all such strongholds, situated as they are upon the very edge of the land, and mostly upon the extreme western edge, are suggestive of builders who, metaphorically speaking, "had their backs to the wall"; and the only population of this island whom history knows to have found itself in that position for any length of time—and such forts could not be built in a day—were the Britons.² There is no record, for instance, that either Saxon or Dane ever maintained a hopeless resistance in Cornwall or in Dyfed against some overwhelming force, whereas we know that this was for generations the plight of the Britons. In certain cases, *e.g.* at Tintagel, a convenient point has been seized by the Normans, who had ever an eye for strategic positions; but the great majority of cliff-castles show no sign of any such later

¹ The name of Dinorwig, Caernarvonshire, is said to embody the name of the *Norseman*. Llys Dinorwig and Dinas Dinorwig are two camps to the north-west of Llanberis. Another view would connect the name with that of the Ordovices, the British tribe occupying North Wales in Roman times.

² There was a great deal of fighting in Cornwall from the fifth century onwards owing to the repeated landings and settlements of Irish on that coast. These may have built, or at least occupied, one or other of the *castells*, but their national type of fortress is said rather to have been the *dun*, the stone-built hill-fort of circular plan described in Chap. VII.

occupancy, and this discounted, such evidence as we have goes to show that they are the work of an older race. The similarity between the cliff-castles of Briton and Breton seems to decide the question, at least as a general principle. The cliff-castles of the south-west and west coasts were probably the last strongholds of a race beaten in war, degraded and impoverished by defeat, pent up in a barren and unprofitable land, yet loth to take the last step and depart overseas to join their kindred in the newer Cornwall—Cornouaille—in Brittany. The very reasons which prompted the Britons to seek asylum in Cornwall and Wales,—*i.e.* the unattractive poverty of barren hills and moors—left them there for centuries undisturbed by any great influx of Saxons, Danes, or Normans. The whole of those western lands teem with monuments—cromlechs, circles, avenues, &c.—admittedly of British origin, and it seems to be a legitimate conclusion that the cliff-castles also are in most cases British.

Of a different type is the so-called “Roman Camp” on Wind Hill, Lynmouth. Between the Bristol Channel on the north and the Watersmeet Valley on the south lies a tongue-like mass of rock, less than half a mile wide at the base by Countisbury, where it rises to 855 feet, and slowly trending downwards for a full mile to its apex at Lynmouth. Right and left the drop to the level of the river and of the Channel is as abrupt and rugged as can be, and the native rock juts up naked through the thin turf in the true fashion of a Devonshire tor, so that little of the whole area can ever have been habitable, let alone cultivable ground. Across the base runs a single immense vallum, 35—40 feet in height, with the usual ditch upon the outer (E.) side; and the peculiarity of the design is that this vallum does not take, as usually happens, the shortest line from precipice to precipice, but runs diagonally down the northern slope in a direction S.E.—N.W. Its total

length is about 1250 feet.¹ Travelling along the coach-road from Minehead to Lynmouth, one passes the defences just where they abut upon the edge of the cliff some 300 feet above the sea, full in face of the splendid pink and red wall of Countisbury Head. Where the vallum mounts the actual crest of the hill, just behind the few cottages which make up the village of Countisbury, there is a gap—the original entrance—through which leads a cart-way from the village to nowhere. It would be hard to find a position for a camp more inhospitable, more defensible, and more beautiful in its surroundings, unless indeed the perfect little work of Old Burrow, 2 miles further to the east, surpasses it in the last-named respect.

This, the most elementary method of fortification, would be adequate only in spots begirt on all other sides by precipices of a height and steepness sufficient to preclude attack; and amongst the tame highlands of England such spots are rare, in southern England and amongst the chalk hills especially,² where abrupt slopes are the exception and precipices are unknown. Amongst the harder limestone and other rock systems of the west country they are of less rare occurrence, and in the Welsh, Derbyshire, and Northumbrian hills they are not infrequent. Along the valley of the Esk between Guisboro' and Whitby is a whole series of promontory forts ranging in plan from the simplest to the most elaborate. Durham itself was once such a stronghold.³

Amongst the finest examples of its class is Blacker's⁴

¹ There is a much smaller but very typical example of this method of fortification at East Hill, Hastings (Fig. 221).

² The best example to be seen in the South Downs is at Burpham, near Arundel (see p. 641). There *may* have been promontory forts on the sites of the castles of Arundel and Hastings.

³ *Cp.* the earlier form of the name, Dunholm, "fort-island."

⁴ The suggested derivation from Bwlch-y-Gaer ("Pass of the Camp above the Defile") does not sound convincing.

Hill (723 feet), Downside, a mile south of Chilcompton Station. The area of the camp (some 15 acres, now grass land divided up by ancient hedges) occupies the summit of a hill to which the approach from the north is to all intents level (Fig. 4): south and west the ground breaks away in small precipices, densely clothed with wood and tangled with honeysuckle and wild clematis, and so descends abruptly some 200 feet to a valley, through which

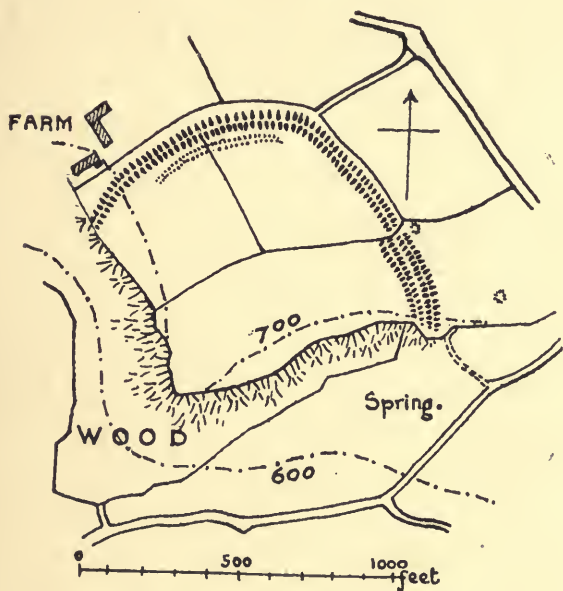


FIG. 4.—BLACKER'S HILL.

runs eastward a small stream to join the Frome. The defences, which cover half the circuit, consisted originally of two valla and two fosses. Though they are ploughed out in places, and elsewhere greatly denuded, the outer vallum is on the north-west an enormous work of quite extraordinary steepness, rising fully 40 feet above the bottom of the fosse without, along which runs the accommodation-road to an ancient farmhouse of Tudor date. On the north-east, where both valla and fosses still remain in fair preservation,

the inner rampart has a height of 6 to 8 feet, the outer 10 to 12 feet, and the interspace, measured from crest to crest, is 40 feet across. On this side was the entrance, a simple gap without accessory works. The foot-hill on the east is littered with the refuse-mounds, pits and kilns, now abandoned and ivy-grown, of old manganese mineries, and immediately outside the defences on the north is a great mound of manganese waste which masquerades as a barrow. Further away to the north-east, and overgrown with turf, is another depressed circular mound, probably of the same origin. Long years of cultivation have completely effaced any *vestigia* which may have marked the area.

The locality has an interest for geologists, as illustrating the manner in which the seemingly hard limestone of the Mendips will develop fissures and faults. At the southern extremity of the area a solid mass of rock forming the angle has broken completely away, and hangs above the steep slope, mantled with ivy and other overgrowth, like a ruined tower; and the area itself is seamed with several other fissures of much greater length, now mostly filled up and grass-grown, and resembling nothing so much as the tortuous beds of ancient water-courses. These fissures are locally known as "Fairy Slats" (=slits), and there are still alive people who can remember them deep enough and wide enough to furnish hiding-places for the children at play. This is the origin of the absurd notion, endorsed by Phelps and so made current, that they were "intended as places of concealment."¹

Maesbury, a fine contour-fort, crowns a height of 958 feet some $2\frac{1}{2}$ miles to the south-west, the Roman Road from Old Sarum to Uphill and Bridgwater Bay passing immediately beneath its northern slope. Five and

¹ Some empirical excavations made within one of these "slats" have apparently produced only negative results.

a half miles south-east, overhanging the same ancient road, is Merehead camp, in shape an isosceles triangle of 6 acres, defended on the east by a double vallum and corresponding fosses. Due east from Blacker's Hill, near Mells, is Tedbury Camp, exactly similar to Merehead in shape, position, and construction, save that the area is very much larger. Almost immediately contiguous to the north-west, beyond a narrow defile, is Wadbury, which more resembles Blacker's Hill in the relatively large extent of its artificial defences. The area is given as 7 acres. Immediately north of these, on an isolated knoll thickly planted with wood, is a small square entrenchment known as Newbury.

Of Little Down Camp (700 feet), upon an outlying angle of Lansdown Hill, $3\frac{1}{2}$ miles west of Bath, little is left but the single fosse, which was of very great width. Within its area (16 acres) are several mounds, possibly barrows.¹ A few yards away from it, upon the level top of the hill to the west of the racecourse, is a fairly well-preserved earthwork of rectangular plan, and therefore attributed to the Romans, but without proof. The Roman *Via Julia* from Bath to the Severn runs at the foot-hills just below the diminutive cliffs which form the only defences of Little Down Camp upon two sides. A mile to the north-east the high road cuts through a small circular camp; a mile north again, on Freczing Hill, are the remains of another of irregular plan and great size; and yet another mile west by north, close to Wick, are the site of a Roman villa and some "Druidical Stones."

Three camps (Fig. 5) of this class lie almost within a stone's throw of one another on either side of the Avon at Clifton, one at the eastern (Gloucestershire) end of the Suspension Bridge, the other two at its western (Somerset-

¹ One of them, opened lately, revealed "nothing of interest."

shire) end. The road which now crosses the deep gorge of the Avon by the bridge is the later-day representative of a far older trackway which, descending from the Cotswolds and crossing the river by a ford¹ a few yards below the bridge, climbed up the opposite bank by way of the Nightingale Valley or Stokeleigh Slade, to continue onwards by Dolebury to Axbridge, whence it branched eastward along the Mendips to Wiltshire, westward by Bleadon Hill to Uphill and Worlebury, and southward to the Parrett, Exmoor, Devon, and Cornwall. The cliffs on either side of the gorge rise to a height of 250 feet. On the eastern side the bend of the stream forms a single blunt-nosed promontory. On the western side the Nightingale Valley, cutting deeply into the face of the cliff, has formed two separate promontories of somewhat squarer plan. Each of the three promontories has been fortified in the same fashion. That to the east is known as Clifton Down Camp (between 3 and 4 acres); of those on the west, the southern² (7 acres) is known as Burgh Walls, Borough Walls, Bower Walls, or Burwalls, and the northern (about $6\frac{1}{2}$ acres) as Stokeleigh Camp.

The general plan of all three fortresses was the same. With the apex of the promontory as centre, there has been drawn across the open ground a series of concentric banks and ditches. Clifton Down and Burgh Walls had each three valla and two ditches; Stokeleigh has two valla in the normal position, with a third outlying bank covering the northern portion of its front, while the edge of the area on the side overlooking the Nightingale Valley is further provided with a vallum roughly pitched with stone, the slope here being insufficient for safety. Of the two concentric valla, the inner had in places an elevation of 30 feet, while the outer is of unusual width.

¹ Phelps says it was distinctly traceable in his time (1839), 18 feet wide and raised 3 feet in height.

² It is now all but destroyed.

In Clifton Down Camp a low vallum of turf runs along one edge of the area where the precipice is steepest, terminating at the extreme western corner in an enclosure of similar construction about 40 yards square. These are probably modern. The other two camps seem to have

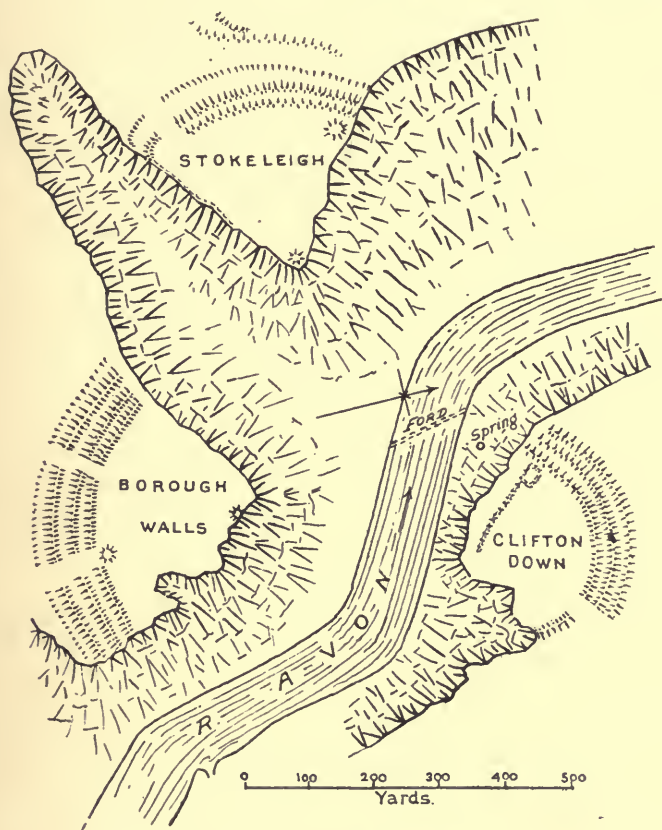


FIG. 5.—CLIFTON CAMPS.

had no such interior works. The main gate of Clifton Down Camp was near the eastern end of the defences, but there was also a narrow entrance at the very edge of the cliff to the west, whence a steep pathway led down the face of the precipice to a perpetual spring near its foot, and so on to the ford. The positions of the gates

in Burgh Walls are so differently described by different authorities that they cannot now be determined. Stokeleigh Camp had one entrance only, corresponding in position to the main gate of Clifton Down Camp. In Stokeleigh Camp, close to the cliff's edge at the northern corner of the area, is a low mound. There was a similar but smaller one at the apex of the area of Burgh Walls, and another just within one of the gateways, while a rectangular depression inside the middle gate has been supposed to mark an old spring or well. According to Phelps, the whole area of this camp was intersected by low banks indicative of ancient buildings, and there were traces of buildings, "Roman or Saxon," at the entrance of Stokeleigh Camp also. If these ever existed they have now vanished. There appears to be no authoritative proof of any Roman occupation of any of the three camps.

There is no reasonable doubt that all these works are pretty much of one date, of British construction, and intended to secure the ancient road which passes between them.¹ If their position can be taken as proof that different tribes occupied the two banks of the stream, then it would follow that the two tribes practised exactly the same method of fortification.

Burgh Walls furnishes a wholesome warning against over-hasty conclusions. During the process of demolishing the great inner vallum, which rose to a height of 18 feet, there were brought to light masses of what seemed to be a "core of burnt limestone mixed with cement." Prebendary Scarth² was led to believe that when the vallum was first built, "fires had been lit at intervals of

¹ There is a similar group of three forts apparently defending the passage of the Teign near Moreton Hampstead, viz. Cranbrooke Castle, Wooston Castle, and Prestonbury; but these are all contour forts, and each is different from the others in plan.

² In *Archæologia*, xliv.

from 9 feet to 15 feet, covered over with limestone, and banked up, holes being left for the admission of air"; with the result that the action of the flames had "vitrified" the mass, rendering it to all intents one solid piece of stone. This theory had for some years passed unchallenged when Prof. C. Lloyd Morgan showed¹ that the supposed purposed and complete calcination was neither complete nor purposed, but merely the fortuitous result of the lighting of fires upon the top of the vallum. The heat reduced the limestone to lime, which was in the natural course of things slaked by rain and carried down between the interstices of the stones below, thus forming isolated lumps of what appears to be "stone set in cement." Traces of similar causes and effects were apparent in the vallum of Clifton Down Camp also. For what purpose the fires were lit does not appear; they may have been beacon fires of very late date, but they certainly were not intended to make a vitrified fort.²

The great majority of promontory forts stand in positions such that their safety can never have depended in any measure upon streams and swamps. Others, and especially those at lower levels, doubtless depended wholly upon the impassable character of their surroundings, although at the present day there may remain no trace of water. The fortress (Fig. 6) known as Carl's Wark,³ near Hathersage, Derbyshire, will serve as an example. Though small in area (600 feet by 150—200 feet), it is eminently defensible, being protected on three sides not merely by the steep fall of the ground, but by the boggy soil at the foot of

¹ See *Proceedings of the Somerset Archaeological Society*, xlvii. (1901).

² Something is said of the "Vitrified Forts" of Scotland and elsewhere in Ch. VI., p. 180.

³ "Carlwark" on the O.M. It may not be a mere accident that this is a Norse name, but nothing is known of the date of the fort. "Wark," a common element in place-names, usually refers to the existence of a fortress on the spot, e.g. Aldwark, Southwark, Newark, &c. One explanation makes Carl to be the equivalent of Grim, i.e. the Devil.

the slopes. On the western side, where the fall of the ground is slight, the approach is barred by a ditch and an earthen rampart, 17 feet or 18 feet thick and 150 feet in length, which was originally faced throughout with unmortared stone, and the slope without is further increased by scarping. The single entrance was at the south-west corner, where the path entered between massive recurring walls, built up of stones which in some cases measured as much as 14 feet by 3 feet 4 inches, the wall on the left

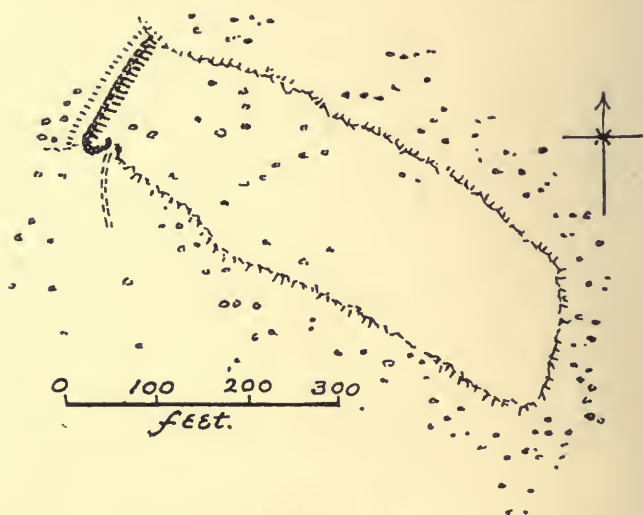


FIG. 6.—CARL'S WARK.

hand projecting like a bold round tower and raking all the southern side of the fortress.¹

If the ground surrounding the camp is boggy at the present time, there is good reason to think that, when the fortress was built, it must have been an impracticable

¹ *Reliquary*, vol. i. (1860). The stone-work of wall and gate has been greatly damaged in recent years. The camp lies amidst wild moorland immediately east of Hathersage. Close by Hathersage church are the remains of a small circular entrenchment enclosed within a single vallum and ditch, which local belief asserts to be Danish, for no sufficient reason.

swamp. The indubitable fact that the soil of England has been growing drier during many centuries must be borne constantly in mind when the strategy of ancient earthworks is under consideration. Thus the camp at Burpham,¹ now feeble enough, must, when first constructed, have been a true peninsula, surrounded on three sides by deep water or even deeper peat-bogs. The alteration has, of course, varied with different localities, but, speaking broadly, there has been a constant and very great fall of

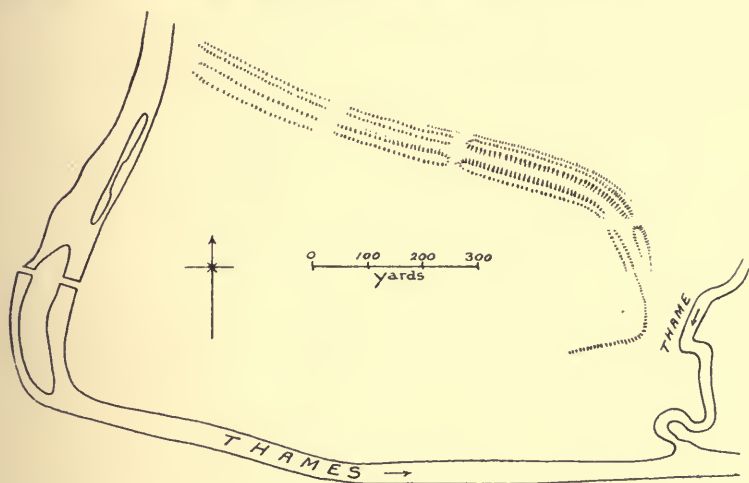


FIG. 7.—DYKE HILLS, DORCHESTER, OXON.

the water-levels. The banking of rivers, the construction of locks and weirs, and other operations collectively styled conservation, have made dry land of large areas which were until a late period riverine marshes, so that such earthworks as the Dyke Hills by Dorchester (Oxfordshire), although at the present day seeming to be incomplete or purposeless, must originally have been very complete and purposeful indeed. These works (Fig. 7)—two parallel valla rising to a height of 16 feet above the floor of the great intervening fosse, itself some 55 feet in width—form

¹ See p. 641.

one side of a rough rectangle, of which the curving Thames and the Thame bound the other sides. The total length of the works was originally some 1,000 yards, exclusive of the recurve at the eastern end ; and despite years of assiduous ploughing, their course is still plainly traceable across the fields, while for 200 yards or so they remain to all intents as they were built, save that the second (outer) fosse is all but obliterated. To-day the fields adjacent, cultivated to the uttermost margin or deep in such meadow-grass as only the fat Thames valley can produce, show no token of their swampy past, but a casual glance over them will show that the area (114 acres) enclosed within the lines is very considerably higher than the ground without—that, in fact, the valla follow the edge of what must have been actually an island in earlier days, the flood-water probably filling the great inner fosse as well as the smaller one without.¹ Although there are plenty of earthworks of greater height, breadth, and length than these of Dorchester, yet from the seeming level of the adjacent fields, and still more from the rigid parallelism of the great walls of earth, they acquire an added dignity which might impress the dullest imagination, without the further associations which attach to one of the sacred spots of English soil. We need not believe, with Richard of Cirencester so-called, that here stood once the Roman town of Dorocina, though certainly there was here a Roman *castrum* of some importance ; and older than the *castrum*, upon the hill beyond the river still stands the contour fort of Sinodun Hill (500 feet), only a mile away ; but here St. Birinus began his evangelization of Wessex in 634, and within the queerly barn-like frame of the présent abbey-church are embodied stones that were first laid in the days of Saxon

¹ An analogous work is that known as the King's Ditch at Bedford, which is still flooded occasionally. This is known to have been constructed by the orders of the English King Eadward the Elder in 919.

rampart consisting of a fosse and *agger*, crossing the road at right angles and extending on each side of the ridge down to the moors," seems at first sight to have no purpose, but unquestionably it was constructed at a time when the moors in question were impassable swamps, periodically drowned by the sea, and rendering the rising ground of Avalon actually an "island-valley," or at any rate a peninsula, approachable only along the narrow ridge of higher ground. This ridge indeed, nowhere rising to the 100 feet level, falls below the 50-feet line at one point between the Ball and the neighbouring tor. Along it ran a very ancient way eastward by Merehead Camp at East Cranmore to Wiltshire, and the "island" was otherwise inaccessible until the Romans engineered a road from the extremity of Weary-all¹ Hill across the fens of the Brue to Street, and so to Ilchester and Exeter. The well-known lake-village by Meare (another tell-tale name) lay but a little further to the west in the fen, whose peat reaches in places a depth of over 20 feet. Whether the lake-dwellers had anything to do with the building of Ponter's Ball is, of course, indeterminable, but it was clearly built by a people who desired to bar the one approach to the "island" from the east.² The tor itself bears unmistakable traces of terraces, lynchets, &c., which may have been military or may have been agricultural, but are unquestionably artificial.

Exactly analogous in their plan, albeit on a far more impressive scale, are the great Cambridgeshire dykes discussed elsewhere,³ and the elaborate series of entrench-

¹ Explained as a corruption of Yr Allt, "The Steep." The name of Street preserves the memory of the Roman *via strata*.

² An obvious theory attributes it to the Britons, who maintained themselves in Ynys Witryn until Kenwalch in 658 drove them westward of the Parrett. Thenceforward the place was known as Glaestinga-burh, Glastonbury. The name of the Saxon King is preserved in that of Kenny Wilkins' Barrow on the eastern borders of Somersetshire.

³ Page 505.

ments lying west of Flamborough Head. The most important of these, locally known as the Danes' Dyke, encloses an area of 5 square miles to which attaches the name of Little Denmark. It extends across the base of the head for a distance of $2\frac{3}{4}$ miles, and is throughout most of the distance double. Pitt-Rivers believed these entrenchments to be the work of invaders coming from over sea and seeking to secure their foothold upon new soil, and unquestionably the tradition embodied in popular names supports this conclusion. Tradition however is a dubious guide, and the terror of the Danes led to their being associated in later times with many works with which they had little or nothing to do.¹ That the Danes did upon occasion practise such a form of defence we know from the *Anglo-Saxon Chronicle*,² and sometimes upon a considerable scale; and if they did so, it is permissible to suppose that similar works were in vogue amongst other related Baltic tribes. It is, again, quite conceivable that the Danes' Dyke was erected by native islanders falling back before some unrecorded attack. "Nothing," says Canon Greenwell,³ "has ever been found in connection with the entrenchments of the wolds, enabling us to attribute them with certainty to any time or people." All that can be said is that the probabilities rather go to support Pitt-Rivers' conclusions. It is not known that the native Britons, at a date previous to their contact with the Romans, ever employed the system of dyke-building on any great scale, and when the Saxon tribes

¹ The constant recurrence of such names as Danesborough, Danes' Hill, Danejohn, illustrates this. It has been suggested that in some cases these names conceal the old Celtic *dinas* "fort," or *dun* "hill."

² See p. 384.

³ *British Barrows*, p. 125. On the other hand there is some evidence, says Canon Atkinson (*Forty Years in a Moorland Parish*, p. 156), to suggest that the Danes' Dyke was the work of men who "not only used flint implements, but made them and moreover made them on the spot." He points out that this is not inconsistent with their having also the knowledge and use of metal.

employed it, it was rather for boundary lines than for strictly military purposes.

There are numerous cases where a vallum and ditch have been drawn across inland promontories by the Normans, *e.g.* at Topcliffe on the Ure near Thirsk (Fig. 151), and at West Tanfield (Fig. 152), on the same river. In these cases, however, such works are always subordinate to the larger and more elaborate works which they cover. There may be instances in which the Norman has merely availed himself of some vallum and fosse of older date, but, failing proof to the contrary, it is wise to suppose that the outer and inner works in such cases are of one age, and that Norman.

As compared with fortresses of other classes, the promontory fort, when really ancient, is generally distinguished by simplicity of plan, economy of labour, and the absence of any discernible provision for the herding of cattle. With very rare exceptions, it shows a single undivided area. Its position is expressly chosen so as to throw upon the hands of nature as much as possible of the task of its defence, and such works as are added are, as a rule, of a very simple kind. Vallum and fosse are in many cases single only, frequently double, but only rarely are there three or more lines. The entrances in almost all cases are quite without elaboration or complication. Most remarkable of all, inherent indeed in the definition of this class of camps, is the entire absence of any containing wall¹ which might safeguard the cattle; and this suggests at once that such camps were not the work of peoples who shared their fortress with their flocks, as the builders of other camps almost certainly did.² If this inference be

¹ In certain of the "cliff-castles" rude containing walls are to be traced, but rarely of any size, or running continuously round the area; *e.g.* The Towans, Gunwalloe, and Kenidjack Castle, St. Just in Penwith.

² It is possible that in some cases there may have been originally some sort of timber or wattled fence surrounding the unbanked portions of the area,

correct, it follows, since man never voluntarily abandons his possessions, that such works must have been built either by a people who had never owned cattle, or by a people who had lost their cattle, or finally by a people who had no cattle with them—built, that is, either by a very early race indeed, or by refugees who had lost their only form of wealth, or by invaders who came not to settle, but to plunder. The first alternative is improbable, and the attribution to refugees and to invaders is more likely; but it is conceivable that amongst them are examples which were actually the work of each of the three possible classes of builders. If some were constructed by refugee Britons, and others by invading Saxons and Danes or Irish, yet others may have been the work of tribes who did not as yet own cattle, at least in any appreciable numbers. That such tribes there must have been is certain. There is no necessity to think that the palæolithic hunter was directly superseded, at however long an interval, by the neolithic flock-master, and it must be remembered that the presence of a pastoral population in one part of the island is no proof that the contemporary populations of other parts were equally advanced in civilization. But, putting aside such speculations as too theoretical, there remains the fact that very many peninsular forts do not appear to offer any provision for the herding of cattle, the only wealth of primitive man. They must therefore have been built to protect the man rather than his beasts. They were not the work of settled pastoral or agricultural peoples concerned to construct permanent homesteads for themselves and their possessions.

Such an arrangement, however, though it might have sufficed for the herding of sheep, could not have served for horned cattle, unless it were of such strength that some trace of it must certainly have been discoverable. Moreover, the evidence of archaeology tends to show that man was a neatherd first, a shepherd afterwards.

CHAPTER IV

CONTOUR FORTS

*“ So silent is the place and cold,
So far from human ken,
It hath a look that makes me old,
And spectres time again.”*

THE double-barrelled definition of Contour Forts, as set forth in the Committee's Schedule (Class B), hardly brings out with sufficient clearness the essential difference between these and the camps of the first (Promontory) class, viz., that whereas promontory forts, properly so called, find part at any rate, and often the major part, of their defences in the natural features of their position, camps of the second class, which are found alike on the hill-tops and on the levels, are provided with artificial defences on every side. For the first subdivision (hill-top forts) the name of “Contour Camps” is a convenient one; for the second subdivision that of “Plateau Forts” is sometimes used. There is no convenient and brief style which includes both.

It is a necessary consequence of the geological character of the high grounds of England that forts of the second class are far more numerous than those of the first class. Constructed for the most part according to the contour of the ground, the variety of their plans is endless, and even when these happen to be similar they vary infinitely in every other point. Amongst them are included at once

the most extensive, the most elaborate, and the most formidable of all English entrenchments.

The transition from the one class to the other is seen in the numerous cases in which a fort, otherwise of the promontory type, is additionally defended by artificial works covering those parts of the circuit which might well have been left to nature. It is, as a rule, quite impossible to guess whether these additional works are of the same age as those defending the neck, or of later date, but it is at least possible that in some cases they were thrown up by later occupants who brought with them new ideas of fortification. Just as the Normans occasionally made partial use of pre-existing promontory fortresses, so earlier races might as naturally avail themselves of the labours of their predecessors. It is obvious that the precipitous open sides of a true promontory fort, while they might serve adequately to keep out one's foes, would be but an ill means to keep in one's cattle, and it is quite likely that the addition of a vallum upon the edge of the precipice was sometimes suggested by the need of safeguarding the flocks. Conceivably this might point in some cases to a later date, or even to a difference of race, in others merely to a more advanced state of culture and greater wealth, while it would still allow of a relatively late date for the construction of, *e.g.*, the cliff-castles of the coast, whether these were the last strongholds of a people defeated, robbed of their wealth, and retreating, but still contesting obstinately the last foot of their old land, or were the first bases of a yet later race of invaders from the sea, who brought with them no flocks or other wealth than their weapons.

Castle Hill (Fig. 9), Clatworthy, Somerset, marked on the Ordnance Map as a "Roman Camp," is a good specimen of the simplest form of these transitional camps, its remote situation and strong natural position having very largely preserved it from destruction. It occupies the level

triangular top (800 feet) of a hill running out westward into the valley of the Tone, here a diminutive burn, its sources but some four miles away in a fold of the Brendon Hills, which face the camp beyond the valley. Across the neck of the hill runs a straight vallum of considerable size with an exterior fosse, the entrance—a simple gap—being near its middle point. On the remaining sides the area—

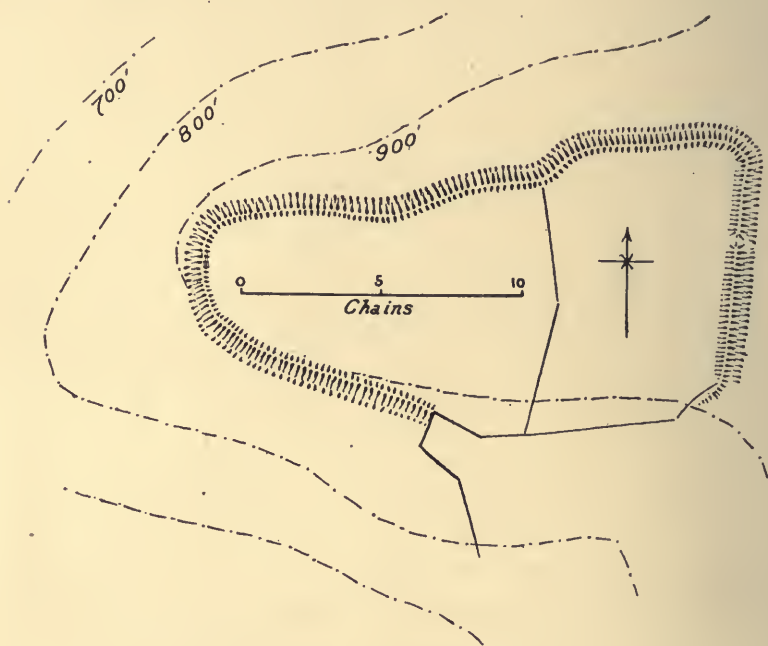


FIG. 9.—CLATWORTHY.

now a rabbit-warren of some 14 acres—is defended by a slight breastwork following the edge of the hill, and the slope beneath is scarped very steeply so as to form a formidable fosse and parapet. For a short space on the south side these defences have been destroyed; elsewhere they are so densely overgrown with trees and brambles as to have escaped injury indeed, but to be very difficult to examine. For the surmise that this was a Roman work,

intended for the protection of certain iron mines at Syndercombe, 2 miles further west, there is no evidence at all. The camp, as it stands, shows none of the recognized signs of Roman construction, nor any trace of Roman occupation; and its position was ill chosen for the defence of mines quite out of sight behind the next ridge of hills. The assertion¹ that there used to be traces of an old trackway leading from it to Elworthy Barrows is inherently probable, if only because past Elworthy Barrows ran the ancient highway from mid-Somerset into North Devon and on to Cornwall.²

On Pulpit Hill (813 feet), overhanging the singularly misnamed Buckinghamshire village of "Great" Kimble, is (Fig. 10) a strong camp of different plan, and of much smaller size; indeed, the smallness of many of these transitional camps suggests that they were probably little more than watch-posts. Here the entire area, about 100 yards across, is girdled by a vallum which, though rising but little above the floor, has on every side a bold outward fall, especially on the north, where the face of the hill has been made very nearly inaccessible by scarping. The eastern side, on which alone approach is easy, is further covered by a second vallum of considerable size, with a continuous berm from 14 to 17 feet wide in its rear and a shallow ditch in front. The breadth of these defences over all averages as much as 100 feet, the scarp of the inner vallum measuring from 30 feet to 35 feet. The second vallum disappears on the steep slopes of the northern and southern sides. The main entrance, now a mere gap in the defences, lies on the east; it is 15 paces wide, and shows no trace of any protective works. There is a second and smaller entrance at the western angle of the camp. The area is strewn with flints, and immediately without

¹ Phelps, *History of Somersetshire*.

² Amongst transitional camps the best known, perhaps, is that called the Devil's Dyke Camp, near Brighton. See Ch. XIX.

the western vallum, where the hill forms a small triangular platform, are to be picked up flakes innumerable, fragments of pottery, and by rare accident an implement.

Enveloped in beech trees the camp is completely concealed from sight, but whoso takes the trouble to climb to

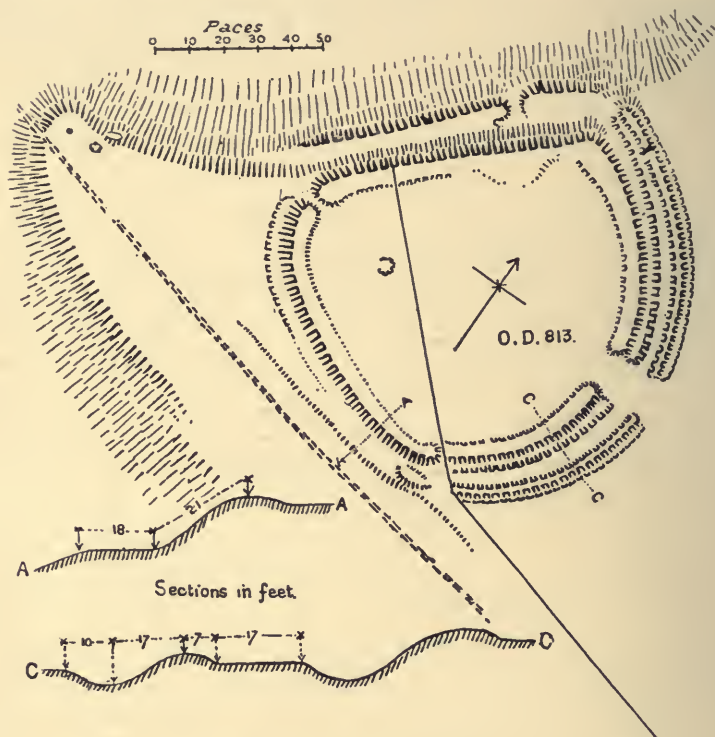


FIG. 10.—PULPIT HILL.

it will, at the worst, be rewarded by one of the finest views in the Midlands—a view stretching for miles across the intervening levels to the distant landmark of Sinodun Camp and Wittenham Clumps overhanging the Thames, to Uffington Castle and the Berkshire Downs, to Oxford, to the island-hill of Brill, and to Bledlow Ridge—the Bloody Hill—closing the view to the south. With its roof of clean beechen foliage, its close-bitten slopes studded with

scented juniper, and its utter remoteness, this is one of the most beautiful spots in all the length of the Chilterns, and moreover a centre of exceptional interest to those who care for earthwork.

Less than 3 miles to the north-east lies Wendover,¹ in the gap between Bacombe and Boddington Hills, two headlands of the chalk. Hidden in the thick woods on Boddington Hill (800 o.d.) is a pear-shaped earthwork of considerable strength, which ordinary maps do not mark;² but on the other hand they mark as a "camp" the mound on Bacombe Hill, which may have been originally a tumulus, and has certainly been used as a beacon, but as certainly was never a camp, albeit the ground about it is much broken by pits, trenches, and trackways of dubious origin. Between the two hills passes a very old trackway leading towards Cholesbury. Wendover itself stands upon one of the old roads to which the name of the Icknield Way is given. Coming out of Norfolk, and rambling along the chalk-ridges towards the Thames at Wallingford, it skirts the western foot of the hills from

¹ Query, the "White Water"? There is still a copious spring near the church, although it has sorely shrunk since the making of reservoirs depleted it. Popular etymology insists that the place was named from the obvious fact that here the roads out of the Vale of Aylesbury begin to *wend over* the hills!

² This, a strictly contour fort of some 20 acres, is the largest in the county. Its defences consist of a single vallum and exterior fosse, without berm or parapet, and the original entrance seems to have been where now stands Calloways (or Peacock) Farm. The vallum is greatly shrunk at most points, but at one part of the eastern side still stands 5 feet above the area. It is 15—18 feet wide throughout, and the height of its crest above the floor of the fosse varies from 10 feet on the west to 20 feet on the east, according as the slope of the hill allows of more or less scarping. The camp seems to have no name; to the natives who are aware of its existence it is merely "the old ditch." The world wags in very leisurely fashion up here on the heights of *Argoed Calchfynydd*, the Forest of the Chalk-hills. When the writer inquired of a farmer what might be the area of the camp, the reply was, "seventeen acres, they do say; but I've been told as *there's scores of thousands of acres of land hereabouts.*" And presently he added, "But I never measured 'em."

Tring to Risborough. Through Wendover and Ellesborough, by Little and Great Kimble, under Pulpit Hill and Whiteleaf Cross, then across the valley and up again along the slopes behind Chinnor, it winds deviously, sometimes embodied in a modern highway, more often a deeply-rutted field-way, but mostly a silent and deserted ribbon of greenest turf drawn out between hedges of hawthorn, precisely as it may be seen by Mildenhall and Icklingham, long miles away towards Norfolk. Overlooking the Way, within a mile of Pulpit Hill, is the fortress known as Cymbeline's Mount, a very perfect little specimen of the Norman type. Two miles to the south is Great Hampden, where the Buckinghamshire Grim's Dyke is to be seen at its best, and close beside it a series of barrow-like mounds of unusual size, one of them marked on the maps as "Danes' Camp." Adjoining the church of Great Kimble is another tumulus, which local wisdom declares to have been "made in the (Civil) wars"; and in the grass field to the west are vestiges of vanished buildings, a grass-grown moated site, fishponds, and some curious and inexplicable trenches of obviously military character. Only a quarter of a mile away to the north, in the field adjoining Little Kimble Church, are other mounds and trenches locally attributed to the Civil Wars, but almost certainly of much greater age. The memory of the Lord Protector¹ flourishes green amongst the peasantry of this part of England, and they do not doubt that he built the Grim's Dyke too. All along the foothills, and everywhere over the flat Plain of Aylesbury, are the moated sites of the houses of the knights and yeomen who stood for Hampden or for King. On the green slope of Whiteleaf² Hill, a mile south of Pulpit Hill, carved out of the turf is the great white Cross, said to have been cut in memory

¹ At Chequers Court they maintain that he resided, and there is still preserved his baby linen.

² *I.e.*, White Cliff.

of some great fight with the Danes. If so, it has failed of its purpose, for no man knows when or where was the "sword-play." Perhaps it was the same affray as that which gave a name to the Bloody Hill beyond the valley, which likewise boasts its own but smaller Cross. Every age and every civilization has left its mark upon the soil within a two-mile radius of Pulpit Hill. The beauty of the spot appealed even to the Roman, and under the sod by Little Kimble Church lie the foundations of Roman buildings.

Standing upon a spur of the chalk (851 feet), 13 miles west-south-west of Salisbury and 5 miles due south of Tisbury station, is Winkelbury¹ (A.-S., *wincelburh*, "the corner fort"). It embraces (Fig. 11) an area of $12\frac{1}{2}$ acres. As usual, the lines which cover the neck of the position are much stronger than the rest of the enceinte, and moreover they are trebled, not in immediate sequence, but so as to leave considerable interspaces. Of the three lines the midmost is the strongest, the vallum having originally been 7 feet high, with an outer ditch $11\frac{2}{3}$ feet in depth and 5 feet wide. A gap 90 feet in width divides these works at the centre, the two halves of the entrenchment lying not in a direct line to right and left, but *en échelon*, and with a slight overlap. At either end were other entrances, respectively 55 feet (east) and 115 feet (west) in width. The great size of these three openings, which were proved by excavation to be original, is very remarkable, and Pitt-Rivers suggested that they were expressly made to facilitate the driving in and out of large herds of cattle. Equally remarkable is the great depth of the fosse as compared with its width.

¹ The particulars of this camp are taken from Major-General Pitt-Rivers' account, *Excavations in Cranborne Chase*, Vol. II. There is another camp of the same name near Basingstoke, and at Bicknoll, on the northern border of Wilts, near Clyffe Pypard, there would seem to have been one of the same plan.

The inner vallum (originally 9 feet high, with a fosse of the same depth, but only 2 feet 2 inches in width) sweeps across the neck in a semi-circular course, with an entrance in the centre; whence was traceable north-

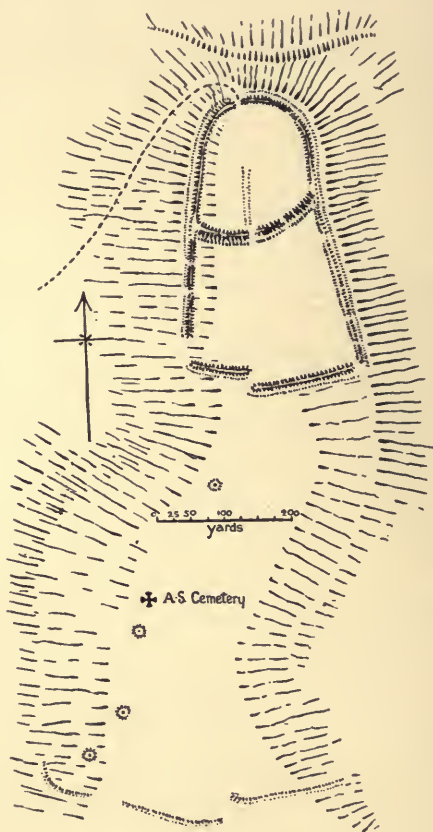


FIG. 11.—WINKELBURY.

wards across the inner area a shallow depression like a roadway, suggesting that this was "the middle street of the camp." The soil hereabouts showed traces of pit-dwellings. Through a small entrance in the northern rampart opening upon the steep face of the hill, an old track runs downs to a spring half a mile to the west.

Other tracks score the hillside upwards from the spring to the open ground south of the camp, where are traceable slight but definite remains of a third vallum, arranged *échelon*-wise across the neck some 566 yards to the south of the middle vallum. Excavation proved the camp to be of pre-Roman time, with very few traces of later occupation until Saxon days. The Saxons had used the outer area of the camp as a cemetery, and 31 skeletons were here unearthed.

The plan of the whole work is interesting, shewing a triple division which is not uncommon in camps of a certain magnitude.¹ The inner camp was apparently the residential area and the citadel; the second area served probably as a corral for the cattle at night or in time of danger; while the much more extensive area of the outer camp would provide sufficient pasturage whenever it was deemed unwise to take the herd further afield. The general disposition is precisely that of the mount-and-bailey fortress of a far later date, *i.e.* the Norman Castle with its keep and inner and outer wards.

On two bold spurs standing out north and south from the Blackdown Hills are the two splendid fortresses known as Hembury Fort and Castle Neroche.

Hembury Fort (880 feet), 4 miles west of Honiton, has been called "the grandest monument of the military skill and strategy of the Britons in the county of Devon."² In length 360 yards, in breadth at its wider (northern) end 110 yards, it contains (Fig. 12) approximately 8 acres. Round the whole of this area run two valla with corresponding fosses. The inner vallum is strongest towards the north, where it rises 10 feet above the area; and while throughout most of its length it is 40 feet above the fosse, at the

¹ For a much smaller example of similar plan, cp. Bury Castle, Selworthy (Fig. 23).

² J. C. Wall, in *Victoria Co. Hist. of Devonshire*.

northern end it rises to as much as 60 feet. The steep slope of the hill on every side but the north renders the second vallum little less formidable. A third great vallum envelops all but the eastern side, which must indeed always have been unassailable. At the north-west corner, the weakest point of all, this third vallum is broadened out to form a platform 50 yards in length, with breastworks in front and rear; and the whole is here covered by yet a fourth vallum passing round the north-western angle. The area is divided into two parts by two parallel traverses from 3 to 5 feet in height, running east and west about 60 feet apart, that to the south being further protected by a fosse on that side. The northern traverse bends at the western end in such a manner as all but to close the narrow interspace.

Just at this point is the main entrance, the path climbing diagonally up the steep side of the hill past the outer lines of defences, overhung throughout by the enormous ramparts and flanked on either hand by lower banks which traverse the fosses. The gap in the inner vallum gives access alike to the two divisions of the area and to the interspace between them. At the north-east is another and smaller entrance, which, although it opens upon a slope almost too steep to climb, is defended by a circular mount without the rampart, and enfiladed for a length of 50 feet by the recurve of the vallum. A third path, approaching from the southern base of the hill, passes along a level berm between the two eastern valla, and bifurcating, climbs up to the southern area at two points near its north-eastern corner. This portion of the area shows in the centre the vestiges of a large mound encircled by a shallow fosse, and at its extreme southern end a kind of circular enclosure of very small size, with some signs that there has once been a building here, or possibly a beacon-hearth.

This magnificent work has never been explored, and

unhappily its area, now again surrendered to the heather, was for some years under the plough, so that there remain on its surface no vestiges save the all but obliterated

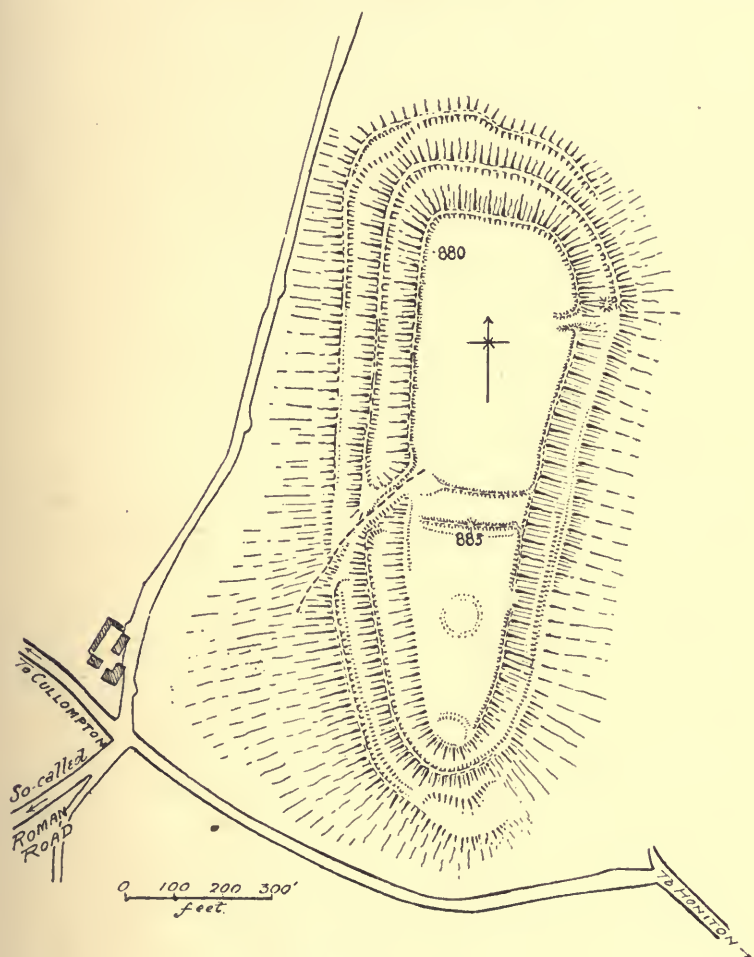


FIG. 12.—HEMBURY FORT, HONITON.

mound above mentioned. Amongst Devonian archaeologists of the last century it was a pet ambition to identify it with the Moridunum of the *Itinerary*, and it is said that the high road from Honiton to Cullompton,

which runs immediately below the fort, represents an older Roman road. There is no visible reason to think that the Romans had anything to do with the building of the fortress, which may very well be in the main a British work. On the other hand the double traverses dividing the area, and still more the central mound with its fosse, are dubious features suggestive of later methods of defence, as also is the small enclosure at the southern end. It is quite possible that all these are later modifications of the original plan. The double area and the mound together are certainly suggestive of Norman work.¹

Of Castle Neroche it must be said at the outset that, *as it stands*, it is not a British work. What in the case of Hembury Fort is merely a doubt is in that of Castle Neroche a certainty, for excavations² have shown conclusively that, in part at any rate, it is a Norman fortress, and nothing whatever was found either of Roman or of earlier date. Nevertheless, the very partial character of the

¹ This is in some sense corroborated by certain earthworks on the narrow ridge of high ground which runs south-east from the foot of Hembury Hill towards the Otter. It is "a long tongue of land, well fortified naturally, but evidently in addition scarped all round. The mound at the south end is evidently artificial. It has been trenched round, is about 13 feet above the natural surface, with a diameter of 230 feet. . . . At the narrowest part of the ridge a ditch has been cut right through. There is then a rhomboidal mound, say 130 feet, trenched about, and at the extreme point towards Hembury another, larger and higher, say 200 feet, of somewhat oval shape, also trenched round. . . . All these mounds have depressions in the centre"—the hills upon which they stand are known respectively as Bushy Knap (S.) and Buckerell Knap (N.). There is a plan of the works in the *Journal British Arch. Assoc.*, vol. xviii. If the description is correct, they are certainly of the class usually supposed to be Norman; and the builders of these may have had some hand in tampering with the older works at Hembury.

² See *Proceedings of the Somerset Archaeological Society*, vol. xlix. (1903). The origin of the name of Neroche is unknown. It was in use in the days of Edward I., and even of Henry III. Locally the camp is said to be styled Castle Rache, but more usually it is referred to simply as "The Castle." Prof. Boyd Dawkins would derive the name from Brythonic *rhac*, "spine."

investigations thus far made leaves in doubt the original date of the main portion of the works, and there is at any rate the evidence of surface-finds to show that the site had its occupants in far earlier times.¹

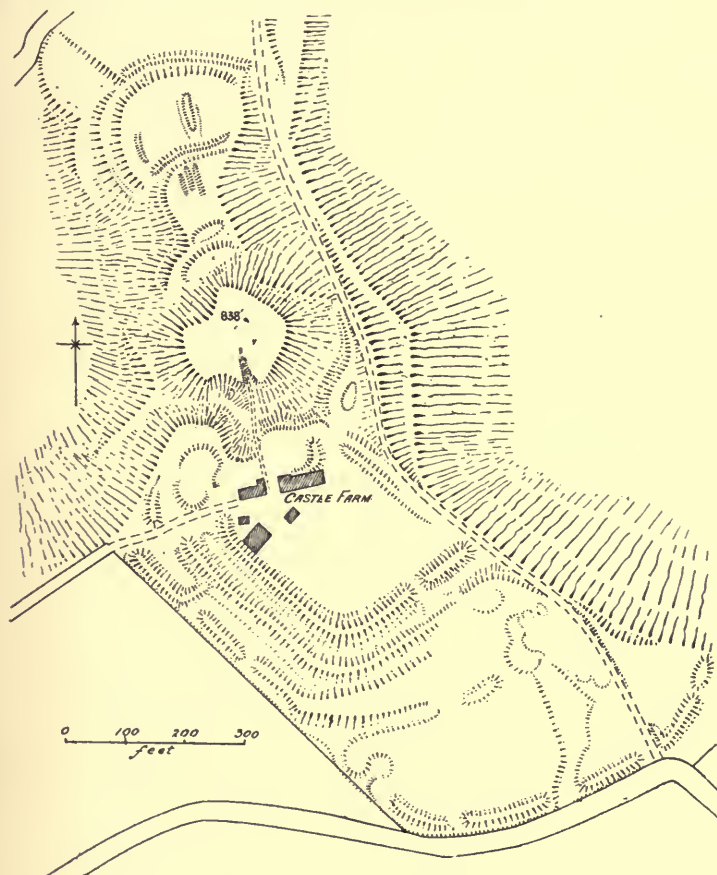


FIG. 13.—CASTLE NEROCHE.

The plan of the fortress (Fig. 13) will give more information than a lengthy description. It occupies a tongue of the hill jutting out northwards over the valley-land known as Taunton Dene, the detached mount at the extremity—

¹ Worked flint and chert are to be picked up just outside the southern enceinte.

the Beacon—reaching the height of 838 feet. The plan shows the peculiar triple division seen at Winkelbury, and characteristic also, as will be seen later, of many Norman castles. The inner fortress, now occupied by the Castle Farm, is surrounded by a circular earthen vallum of very great strength. The manner in which the outermost vallum ends abruptly upon the edge of the hill to the east, and the absence of any discoverable defences along the eastern edge of the outer area, are characteristic of early castrametation; but, on the other hand, the mount—the isolation of which is possibly in part natural, but has certainly been much increased by human agency—is a feature commonly associated with works of post-Roman time. On the mount itself have been exposed foundations of rough masonry, and the numerous terraces, walls, and trenches traceable under its northern slope are almost certainly of late date. Under the slope to the north-west is a spring. The planting of the castle with trees has greatly interfered with the regular plan of the works, and makes it difficult to see their correct form, while it completely blocks out the view from the Beacon southward, previously almost as completely dominated as the rest of the surrounding country. Even so the outlook is immense, embracing the whole plain of Somersetshire as far as the Downs of Wiltshire, the Mendips, Worlebury, Brent Knoll, and Exmoor.

If the whole of this tremendous series of works was really the creation of a builder or builders of the Norman time, it is certainly remarkable that there should be discoverable no record either of their construction or of any castle at all upon the site, the more so as the district was for generations a royal forest; and dangerous as is the *argumentum ex silentio*, it must be admitted that the works are unusually extensive and ambitious for a Norman fortress which has no history whatever. It is quite possible that this is one of many examples of the

adaptation of a pre-existing British work to the requirements of a Norman builder, but whether that builder was one of the unlicensed castle-makers of King Stephen's time, or otherwise, it is at present impossible to say.

In the examples thus far described, the situation chosen is always a promontory. Such forts are transitional between the promontory fort proper and the contour fort strictly so called. The latter stands upon a more or less elevated hill-top, wholly or almost wholly isolated, but in no sense of peninsular form; and its defences following horizontally the curves of the hill, the resultant plan is roughly that of a horizontal section of the ground at that level. Such a section may show every variety of outline from an almost perfect circle or an approximate square to the most irregular figure. As always, topography and geology are the ultimate determinants; the smooth, rounded chalk downs show forts of more regular plan, whereas the opposite extreme is to be found upon the broken rock-summits of the limestone and other rock-formations, or upon the less lofty but equally irregular sandy hills. Typical of the one is the camp upon the Herefordshire Beacon (Fig. 28), of the other that at Easthampstead (Fig. 14). Even upon sandy soils the earthworks frequently attain very formidable proportions; Cæsar's Camp, Sandy, has a vallum of which the scarp in places rises 40 feet from the ditch; and Danesborough, buried amongst the pine-woods of Bow Brickhill, Bucks, has a scarp of 35 feet and a fosse still 10 feet deep.

Cæsar's Camp, Easthampstead (c. 400 feet), occupies the summit of a sandy hill upon Easthampstead Plain, equidistant from Sunninghill, Wokingham and Sandhurst. The irregular contour of the hill gives to the camp perhaps the most eccentric plan of any British camp remaining, and the happy idea of comparing it to an oak-leaf has been adopted generally. The area, which measures 600 yards in total length, is surrounded by

a continuous vallum and fosse, and so steep and loose is the slope of the hill at the north-west corner that no further defence was there needed. Elsewhere a second vallum follows the outer edge of the fosse, and at the southern end,

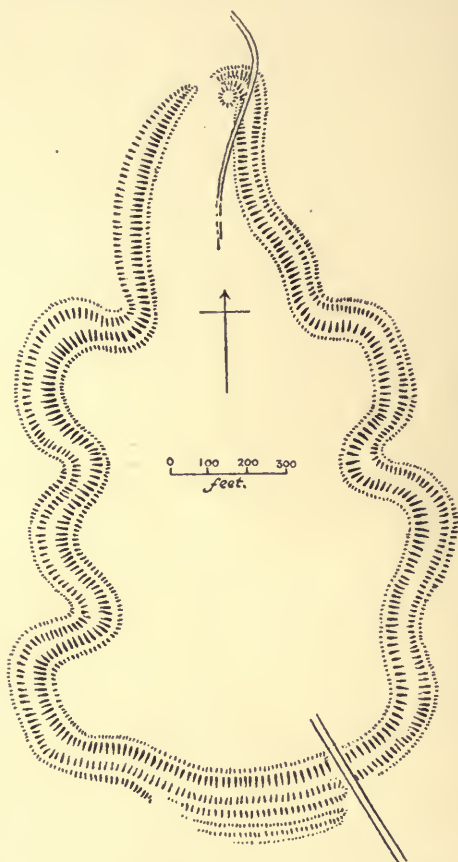


FIG. 14.—CÆSAR'S CAMP, EASTHAMPSTEAD.

where the ground rises gently and the approach to the camp is easy, this is supplemented by a second fosse and a third vallum. This, the "only camp of any importance in the eastern part" of Berkshire, is perhaps as formidable a specimen of military fortification as can be found upon a soil of this sandy character, although at the

present time the thick growth of pines and other evergreens conceals its real proportions. There are entrances at either end : by the southern and original gate enters a road said to be Roman, which traverses the length of the camp and passes out at the north end by a later opening just to the right of the older gate. Immediately within the ramparts at this end is a small mound. The road, projected southward for half a mile, falls into the Devil's Highway, the old Roman main road from London by Staines and Sunningdale to Silchester, 14 miles to the west. Surface finds of Roman character—pottery, coins, &c.—have been found along its course.

Ham Hill is justly famous amongst ancient fortresses. It lies in the south-eastern corner of Somersetshire, between Cadbury, 10 miles to the north-east—one of the few works which can challenge comparison with it—and Castle Neroche, 12 miles due west. Nothing but an illustration (Fig. 15) can give any idea of the irregularity of its plan, which conforms rigidly to that of a rocky mass detached from the main body of the hills to the south-east. The area embraced is some 210 acres, and its circuit, which follows the 400-foot contour line, amounts to $2\frac{1}{2}$ miles. The defences consist in most parts of two enormous valla and an intervening fosse, but on the north-eastern side, where the fall of the ground is less rapid, there are three valla and two fosses. The finest portion of the works encloses the irregular extension of the area northwards towards the village of West Stoke. The tremendous labour involved in the construction of the fortress can be dimly realized if one scales the hill from that side, bearing in mind that the hill is itself solid rock of a hardness and durability which give it a high value for building purposes. The surrounding villages are mostly built of Ham stone ; so are the churches for miles about ; and hundreds of tons of the stone are yearly sent away to greater distances. Tough as the rock is, it

seems almost impossible to believe that these great trenches can have been excavated before the introduction of metal tools. Yet there is ample proof of the continuous occupation of the hill from Neolithic to Roman times.¹

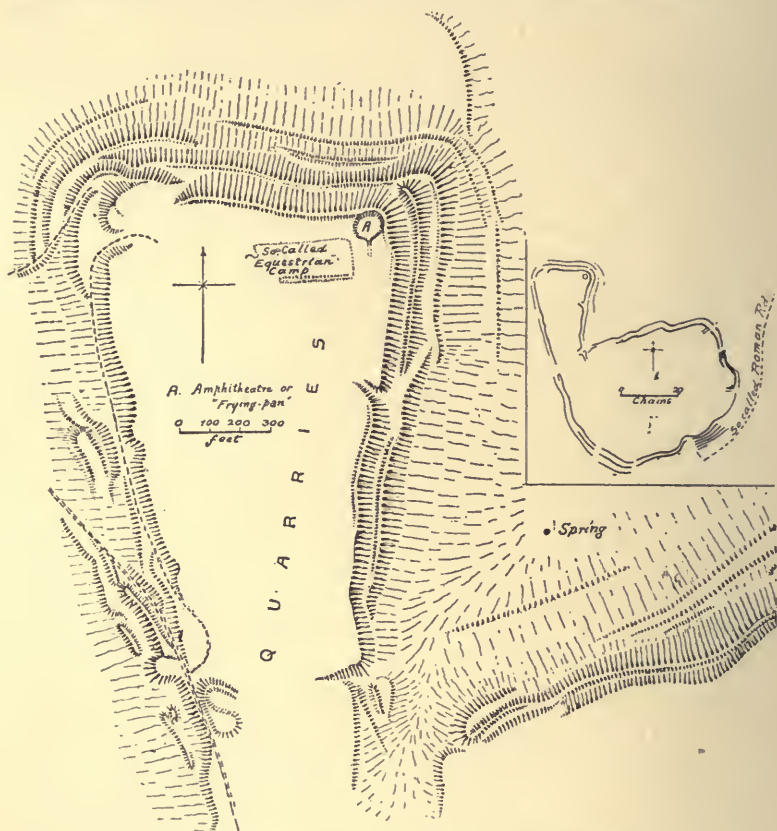


FIG. 15.—HAM HILL CAMP, NORTHERN PORTION.

At the present time two-thirds of the area are under plough, the remainder cut up by quarries old or new, and the whole of the western side of the camp has been so much disfigured that it is impossible to say what may have been the previous appearance of its floor. The one

¹ It has been compared in this respect with Hod Hill, Dorset, and Burrough Hill, Northants.

portion spared to its native genius is that contained within the northern angle about the so-called "Frying-pan." This is an anomalous shallow depression immediately within the angle of the ramparts, perfectly circular, and some 20 paces in diameter at the floor. From it runs a broad and perfectly level depression southward, forming, as it were, the entrance-way. Rustic imagination has seen in these works the semblance of the bowl and handle of a frying-pan, and infinite is the contempt for the stranger who confesses never to have heard of it. They will tell you with gravity that "hundreds of thousands of folks" come there to dance on holidays; and soothly the turf is smooth enough and firm enough to make a capital dancing floor, if the bank-holiday lads and lasses of to-day are but sorry substitutes for the fauns and the nymphs.

What the "Frying-pan" really was is unknown; not yet has Gallio found the energy to open its diminutive floor and set the question once for all at rest at the cost of a week's digging. Sir R. Colt Hoare, who described the camp,¹ was content to say merely that it "resembled an amphitheatre in miniature," and was "not much larger than an English cockpit." Near it, he was told, had at one time been some "low stones fixed in the ground at certain intervals and perforated," which were "supposed to have served as picquets for cavalry."² He mentions also the finding of "stone cisterns," and in a crevice of

¹ *Archaeologia*, xxi.

² Query: Was the "Frying-pan" indeed a cockpit, or a badger-pit? or even a prize-ring? And had the "low stones perforated" anything to do with roping off the ring? Or was it perhaps a mediæval maze? An amphitheatre in the common acceptance of that term it certainly was not, unless Ham Hill were the Land of Lilliput! Prof. Haverfield (in *Vict. Co. Hist. Somerset*) pronounces against its Roman origin. In *Archæol. Journal*, vol. xxxi., No. 124, p. 320 (1874), the dimensions of this "amphitheatre" are given as follows:—"Diameter of circus or area, 67 feet; diameter over all, *i.e.* from top to top, for spectators, 104 feet; length of entrance existing, about 20 feet, cut through the base of the embankment forming the southern boundary; angle of inclination of slope from level, about 30°. The entrance is nearly south."

the rock "numbers of fragments of skulls, bones, lance- and spear-heads, articles of brass and iron, and many fragments of chariot wheels." He appears to have thought that the position was garrisoned by the Romans, and according to one view there is Roman work in parts of the existing defences. Within the last few months a Roman villa has been discovered close to the eastern entrance, and surface finds of Roman character are common. Mr. St. George Gray has given¹ a summary of these finds, including a large portion of an extremely fine Roman peytrel of scale mail. The finds cover the whole period from the Neolithic Age down to Saxon times, and many of them bear a close resemblance to articles of the Bronze and Early Iron Ages found at Hod Hill, Dorset, and in the Lake-Village at Meare, Glastonbury. There is nothing to show that the place was ever a permanent Roman post; rather, says Mr. Gray, the evidence "would seem to imply that the inhabitants during the Roman occupation were not a rich community."

Immediately under the north face of the hill, below the "Frying-pan," is a water-hole known as the Holy Lake, and in the combe to the right of it rises the Hambury² Spring. The conical hill of St. Michael, overhanging Montacute, was once a formidable Norman fortification. Less than three-quarters of a mile to the north-west runs the Roman Road—the Fosse Way—from Ilchester to Exeter, and under the south-east slopes of the camp the Ordnance Map lays down traces of another following an almost parallel course, but this is perhaps not Roman. The camp is in sight of Neroche and Cadbury, and commands a view of many miles over the level plain of Somersetshire to the north-east, north, and west.

¹ *Proc. Soc. Antiq.*, vol. xxi., 128, *sqq.* The Roman "finds" seem to have come chiefly from the northward extension of the camp and the vicinity of the "Frying-pan."

² Called "Wambury" on 25-inch O.M.

The tremendous fortress at South Cadbury¹ (East Somerset), some five miles north of Sherborne and six miles east of the Roman station on the Fosse Way at Ilchester, has a double claim to notice. In point of strength it is one of the most formidable of contour-camps, boasting

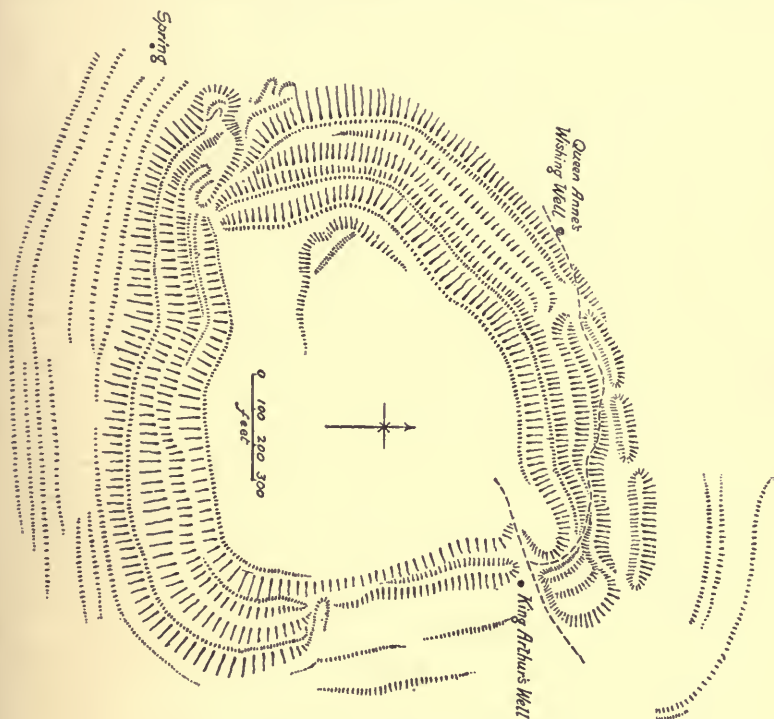


FIG. 16.—SOUTH CADBURY.

(Fig. 16) no less than four² successive lines of ramparts and scarps, carried entirely round the isolated and some-

¹ The name of Cadbury seems to be almost confined to the south-west of England. It occurs three times in Somersetshire, and three times in Devonshire. There is a "Gadbury Banks," a camp near Eldersfield, Worcestershire.

² Tremendous as is this series of rings, it is surpassed by others. The fortress known as Hen Dinas, or Old Oswestry, Salop (Fig. 17), $1\frac{1}{2}$ miles from the present town, has no less than five successive lines of valla and fosses ringing an isolated hill and enclosing an inner area of 15 acres, an outer area of upwards of 50 acres.—Hartshorne's *Salopia Antiqua* (1841).

what square hill which gives a name to Sutton Montis, the village at its foot. When seen from a distance the four lines rise one above the other like so many terraces.

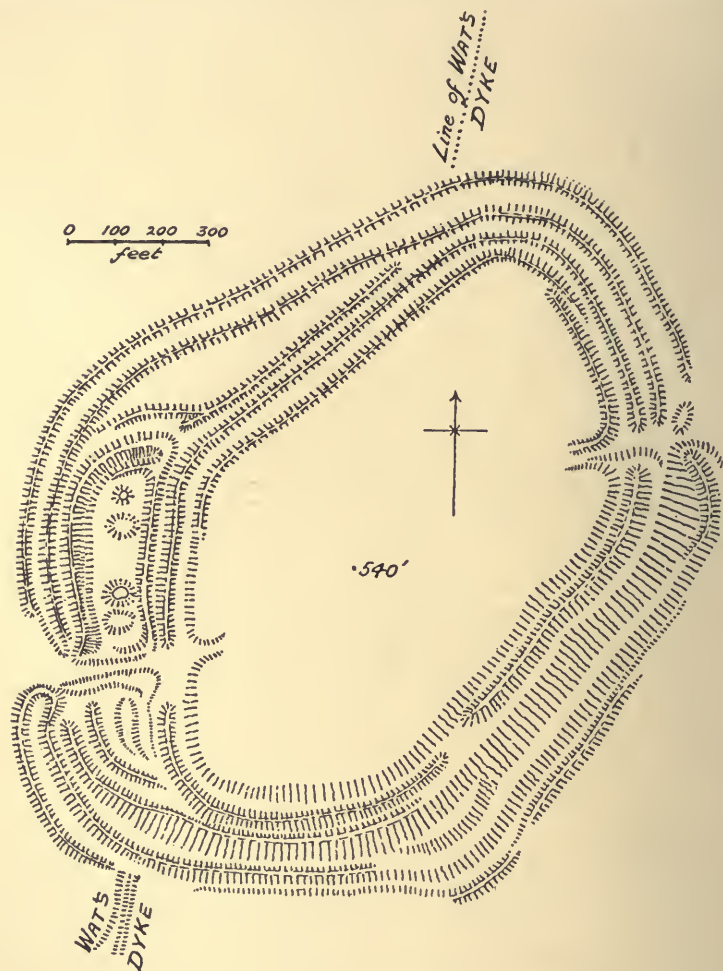


FIG. 17.—OLD OSWESTRY.

The hill (400 feet), extremely steep on all but the east side, is of oolitic formation, and the trenches are in many places excavated in the actual rock. The area,

which rises considerably above the inmost ring of defences, extends to 30 acres. Of the four entrances now existing, those to the north-east and the south-west are original, and the recurve of the ramparts right and left of the former (principal) gateway is very marked.

There is a quaint description of the spot as Leland saw it in the first half of the 16th century. "At the very south ende of the chirche of South Cadbyri standith Camallate, sumtyme a famose toun or castelle, upon a very torre or hille, wunderfully cnstrengthened of nature; to the which there be two enteringes up by very stepe wayes, one by north-est, another by south-west. The very roote of the hille whereon this forteres stode is more than a mile in cumpace. In the upper parte of the coppe of the hille be four diches or trenches, and a balky waulle of yerth betwixt every one of them. In the very toppe of the hille, above all the trenchis, is *magna area* or *campus*, of a 20 acres or more by estimation, wher yn dyverse places men may see fundacions and *rudera* of walles. Ther was much dusky blew-stone that peple of the villages therby had caryid away. . . . Much gold, sylver, and coper of the Romain coynes hath been found ther in plowing, and likewise in the feldes in the rootes of this hille, with many other antique things, and especially by este. Ther was found *in hominum memoria* a horse-shoe of sylver at Camallate. The people can telle nothing ther, but that they have hard say that Arture much resorted to Camalat."¹

It has been suggested that the fortress was "the head and front" of the British resistance against the South and West Saxons during the long century which elapsed between the storm of Sarum (552) and the ultimate conquest of Somersetshire to the banks of the Parrett by

¹ Leland's *Itinerary*, Vol. II., fol. 46. Upon maps of 1575 and 1610 the spot is marked "Camallek."

Kenwalch of Wessex (658). About it would gather traditions of that splendid, if hopeless, struggle; and as tradition faded into legend, here were localized the great deeds of the national hero and his "high-souled heroes of the Table Round." Here Arthur held his court, hence he rode forth to his twelve great fights, and hence he was carried dying to the "island-valley of Avilion," there to be laid upon the magic ship and piloted by the Three Queens into spaces of faërie and legend. It may be that the association of the Good King with Cadbury has no better foundation than the immediate neighbourhood of the villages of Queen's Camel, East Camel, and West Camel, in reality deriving their names from the little river Cam or Camel, an affluent of the Yeo or Ivel, under "the very rootes of this hille," where amongst several other ancient springs is one still known as Arthur's Well. Camel suggested Camelot, and no further evidence was desired. In whatever way the seed of the legend was borne hither, it has flourished so greenly upon the spot that "if Arthur's Hunting Causeway in the field below, Arthur's Round Table, and Arthur's Palace within the camp cannot still, as of old, be pointed out to the visitor, the peasant girl will still tell him that within that charmed circle they who look may see through golden gates a king sitting in the midst of his court."¹ It is of no moment that no man knows the truth. Arthur may have been, as Dr. Guest thought, a creature of flesh and blood, the son of parents half British and half Roman. He may be but a forgotten god-name incarnated in human guise. He may have no better title to existence than any other figment of the poet's brain. When the Antiquary has paced and measured these old trenches, sought for any faint traces of their builders, and learnt all that is to be learnt of "gold and sylver and coper of the Romain

¹ Sir E. Strachey, Introduction to *Le Morte Darthur*.

coynes" and such things, he may legitimately indulge the Poet with an hour's dreaming.

The hills lying between the western borders of Wiltshire and Dorsetshire and the east coast are mostly of chalk formation, characterized by gentle curves and smooth rounded contours. Hence the hill-forts of this wide area show mostly mere repetitions of two general types, the oval and the circular. The types of course occur elsewhere, but not with the same predominance.

Of all camps in Britain, be their plan what it may, the oval fortress of Maiden Castle¹ on Fordington Hill (430 feet), 2 miles south-west of Dorchester, deservedly stands first. Its ramparts may be seen to the right of the high road as one travels southward to Weymouth, but only when actually standing upon them can one appreciate their colossal size and their amazing complexity of plan. The camp (Fig. 18) lies east and west, covering the entire summit of a somewhat kidney-shaped hill, with entrances at either end, each masked by overlapping banks and detached mounds to such an extent that even now, when the wastage of centuries has minished them and no hostile force opposes the visitor's entry, their mazes are scarcely to be threaded without hesitation. The peculiar plan of the bastion-like projection at the eastern entrance is especially noteworthy and will be met with in one or two other fortresses of the first rank. The camp measures 1,000 yards in length and 500 yards in width, the inner area amounting to as much as 45 acres, while

¹ The name is a common one : it occurs *e.g.* at Bickerton Hill, Cheshire, thrice in Cumberland, near Wooler, Northumberland, and near Durham; while the synonymous "Maiden Bower" is found in Oxfordshire (near Steeple Barton), at Dunstable, and attaching to the big series of works, in their present shape of Norman type, at Topcliffe near Thirsk. "Maiden" is said to be the Celtic *mai-dun*, "big hill," and "bower," though from another root, has become merely a dialectic equivalent of "bury." An alternative theory would derive "maiden" from *magh*, "level expanse," and *dun*, "hill"; "bower" from *barr*, "summit."

the entire space occupied by the area and the defences together is more than 115 acres, and the circuit, measured along the crest of the outermost vallum, is 2,500 yards, or little less than $1\frac{1}{2}$ miles. Along the northern side, where the approach is less steep than elsewhere, there are three valla and three fosses, still so huge that from crest to base the banks in places measure more than 60 feet. To the south and south-east the number of lines is five, and round the south-western face as many as six, rising finally about the western entrance to the astonishing number of eight. The lines on the south are, on the whole, less immense, if more numerous, than those on the north, but they attain nevertheless to prodigious proportions, while the rapid fall of the hill on this side adds enormously to their strength. Many of the larger valla show a kind of broad platform running behind the crest, as if to provide standing-room for the defenders. The highest part of the area is that towards the east, and a slighter vallum with a fosse on the west side, crossing the area from north to south, divides this higher part from the lower and larger western portion. Warne fancied that this traverse represented the original western limit of the fortress, which he believed to have been subsequently enlarged.¹ Another theory is that it was constructed to keep the cattle apart from the human occupants of the camp. Within the area is a pond of modern construction. It was made in 1868, and in digging it there were brought to light the undisturbed refuse-pits of the ancient inhabitants in considerable numbers—as many

¹ In July, 1907, during the meeting of the British Archaeological Association at Weymouth, some small diggings were made with the express purpose of testing this theory. The results, and the evidence upon which those results are based, were not available when this note was written, but it was stated that the excavations showed this transverse fosse and vallum to have been always single, and suggested, further, that the camp belongs to three different dates. It is admitted that these conclusions rest upon evidence of a very delicate character, and until that evidence is made public any discussion is idle.

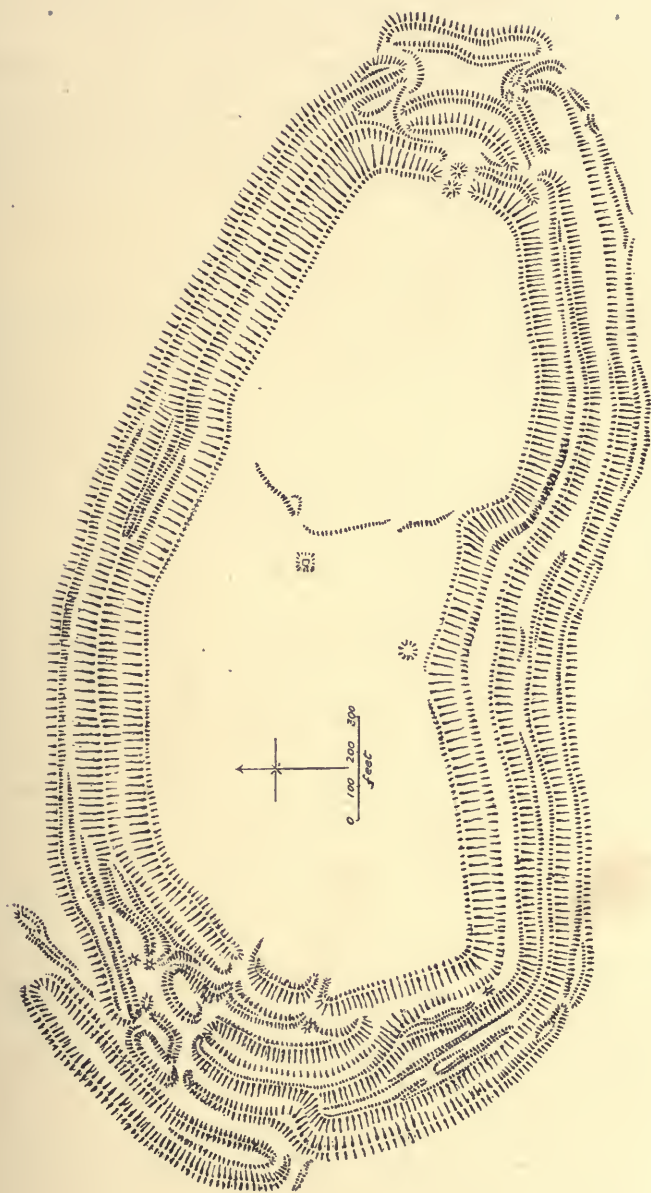


FIG. 18.—MAIDEN CASTLE, DORCHESTER.

as seven within an area of 16 square yards—containing fragments of handmade pottery, bronze rings, and other relics of an early date.¹

Whoso can turn away from Maiden Castle without feeling some small appreciation of its grandeur may as well waste no time over any further earthworks, for the country has nothing more impressive to show him in that kind. It is a very labyrinth—

Hic labor ille domus, et inextricabilis error.

The ruins of the great rock fortress of Penmaenmawr are Titanic ; gigantic, as the name confesses, are the remains of Tre'r Ceiri, the Giant's Town, on Yr Eifl ; Ham Hill covers a larger area, and Cadbury presents a more striking picture when seen from below, with the added glamour of baseless associations with King Arthur ; Old Sarum's ditches are deeper, its ramparts loftier, its plan more compact and regular, its history more determinable ; but neither these nor any fortress of the prehistoric time in Britain can rival the claims of Maiden Castle to its pride of place. Yet the fortress has no history whatever ; it is as much a mystery as any of the least amongst its fellows. Lying in the very heart of the territories of the Durotriges, it may perhaps be " the Dunium of Ptolemy." It was certainly a permanent settlement in the Bronze Age, and as certainly it was superseded² in the first century of our era by the Roman fortress of Durnovaria, now Dor-

¹ The facts, cited from Warne, dispose at once of the unwarranted theory that this pond was the source of supply in prehistoric times. There can have been no water-hole on the spot when the refuse-pits were formed, nor subsequently until 1868, for in that case the pits would not have been found undisturbed. Aubrey says there was a spring " at " the camp, but does not specify the exact spot.

² The customary Roman coins have been found within the camp, and only prove that it was there in Romano-British times. In Dorchester Museum, however, are some Roman roof-tiles also found within it, which may mean merely that some Roman built a villa here, as another did at Ham Hill. Permanent occupation of Maiden Castle by the Romans, in the military sense of the expression, is unlikely, and has not, so far, been demonstrated.

chester, whose broad boulevards, unique in England, still speak their Roman origin. But to what remoter date the first beginnings of Maiden Castle may go back no man knows. Its extent, the strength of its ramparts and trenches, the laborious piling of mound upon mound, ditch upon ditch, proclaim it the stronghold of a people of large numbers and large resources. The actual length of the valla amounts to more than 5 miles in all, and if it be true, as has been maintained, that it was built before the introduction of any better trenching tools than the stone celt and the pick of deer's horn, it must represent the toil of long years, of generations, possibly of centuries. Thanks to the enormous scale on which the works were planned, denudation has done but little to diminish their proportions. Judged, indeed, by modern standards, the fortress seems to be too large to have been defended by any force which it could shelter. To such objections it need only be retorted that warfare then was not what it now is, and that the most primitive of savages can be relied upon to judge best of what is necessary for the security of his own person and his own property. Palisaded as they doubtless were, its maze of valla, still too steep to be climbed with ease, must have made it impregnable to anything but starvation, and until the Romans came we know of no people in Britain able to undertake the task of reducing by such means a fortress only to be leaguered by thousands of men disciplined to the tedious operations of blockade. It is said that at one point "on the southern side of the eastern section a deep hole may be seen in the ground within the Castle; and beneath a stone lintel in the outermost Ring there appears to be the entrance to a subterranean passage. . . . Local tradition has it that beneath this stone lintel was found a stairway, and that after so much had been discovered, the stairway was filled up with earth." ¹ The same authorities assert that there is

¹ Messrs. Hubbard, *Neolithic Dewponds and Cattleways*, p. 39.

“evidence of apparent subsidence in all the Rings along an imaginary line between” the hole within and the hole without. Subterranean passages are so universally provided by popular imagination that a tradition of this sort must count for little.¹

This land of the Durotriges, whose name yet survives in that of Dorsetshire, is so rich in fortresses of the most elaborate kind as to make it almost a necessary inference that this tribe, if not the original builders, were at any rate responsible for the existing shape of many of the finest camps. Two others which deserve more than passing mention are those of Eggardon and Pillesdon Pen. They lie each upon a lofty hill in a right line west-north-west of Maiden Castle at intervals of 9 miles. Eggardon (Fig. 19), 4 miles north-east of Bridport, covers $47\frac{1}{2}$ acres, with an inner area of 20 acres. Its defences, sadly mutilated in places, consist of double and triple valla and fosses. The two entrances, at the south-east and the north-west, both traverse the defences diagonally, so as to be enfiladed throughout their passage, the valla being in addition strongly recurved about the south-eastern entrance. Warne observed traces of a further line of defence round the base of the hill, especially to the south-west, and the ancient trackway leading from Eggardon Camp towards Powerstock, little more than 1 mile to the north-west, is still plainly traceable. Within the area are many tumuli, and a series of low banks which mark the site of a plantation intended to serve as a sea-mark. The sites of

¹ Such passages were actually constructed by the Norman engineers, but scarcely earlier; and those subterranean passages which the popular imagination persists in seeing wherever the visual eye finds earthworks are mostly distorted recollections of cellars, drains, the culverts of moats, or the familiar underground chambers found in Irish *raths*, and in Scotland known as “Picts’ Houses.” Questions of utility, date, and possibility never trouble the imaginative eye, which insists, *e.g.*, that there is an underground passage leading all the long mile from the well-nigh obliterated (British?) ring-work at Whelpley Hill, near Berkhamstead, to the late mediæval moated site at Grove Farm (Fig. 169).

two British villages are to be seen to the south-east, one close to the camp, the other two miles away, on the line of the Roman road leading to Dorchester.

The entire floor of the camp is strewn with pit-dwellings which revealed no trace of metal, their only yield being

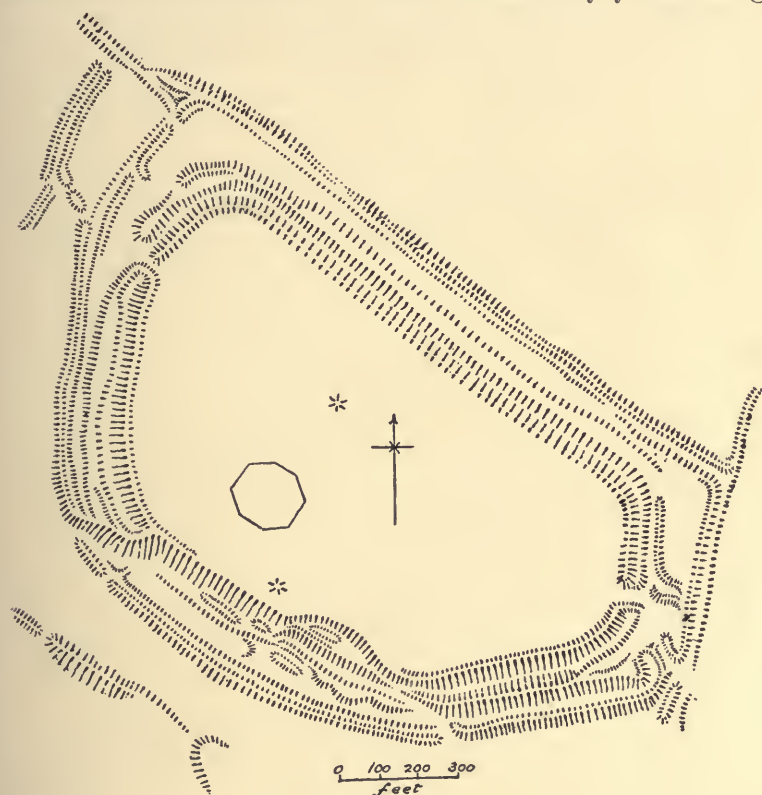


FIG. 19.—EGGARDON.

characteristic neolithic implements and flakes of flint, and fragments of coeval pottery ; but inasmuch as the lines of the defences do not cross or otherwise interfere with the pits, and as no similar pits are to be found either between the valla or on the adjacent high ground to east and west of the camp, the conclusion that the pits were made after the construction of the fortress

appears to be irresistible.¹ And as the pits reveal only the very rudest civilization, it follows that the camp of Eggardon was constructed at a very early date indeed.

Pillesdon Pen (907 feet), four miles west of Beaminster, is the highest hill in Dorsetshire, and commands one of the finest outlooks in southern England. The camp (Fig. 20), much like Eggardon in general plan, but smaller, has a triple line of defences ringing an area of between 8 and 9 acres. The inner vallum is weak except upon the northern and more accessible face. The principal entrance, to the south-west, has unfortunately been a good deal defaced, but apparently the valla to right and left of it were originally broadened out into platforms flanking the passage. The area of the camp is marked by several distinct groups of earthwork. In the centre is a rectangular enclosure, some 200 yards by 120 yards, which has, of course, been attributed to the Romans merely because of its shape. At the southern end of the area are several mounds or barrows which Warne believed perhaps to mark the sight of a beacon; and he quotes from Coker's *Survey of Dorsetshire* (1732) the statement that "this verie high hill hath a Lodge on the toppe, which serveth for a Marke both by Sea and Lande." Without question Coker's remark applies, not to the mounds, but to the rectangular enclosure above mentioned.² Finally, at the north-west end of the camp, says Warne, are "two large

¹ Dr. H. Colley March, in *Proc. Soc. Antiquaries*, 2nd Series, xviii., p. 258. It is permissible to point out that we cannot be sure that all the fortifications of the camp are of one date, and that it is quite conceivable that, *e.g.*, a weaker early camp with but one vallum may have been improved and strengthened at a subsequent period.

² The name of Lodge Hill is of constant occurrence (there are as many as three examples in Buckinghamshire alone), and seems usually to refer to the existence upon the hill-top of some kind of enclosure or building. Sometimes, perhaps, this was a beacon tower, more often probably a hunter's lodge, such as that which once stood on Creech Barrow, in Purbeck Forest, and that at High Lodge, Wychwood Forest.

hollows, which I think were ancient reservoirs fed by natural springs." These he describes as "bounded by a low bank, and two slightly raised and parallel ridges proceed thence some way into the interior." His description recalls the "depression" which Pitt-Rivers considered to mark the main street of the inner camp at Winkelbury.

A much smaller camp of this type is that known as Smalldown, on a spur of the Mendips $\frac{1}{2}$ mile south-

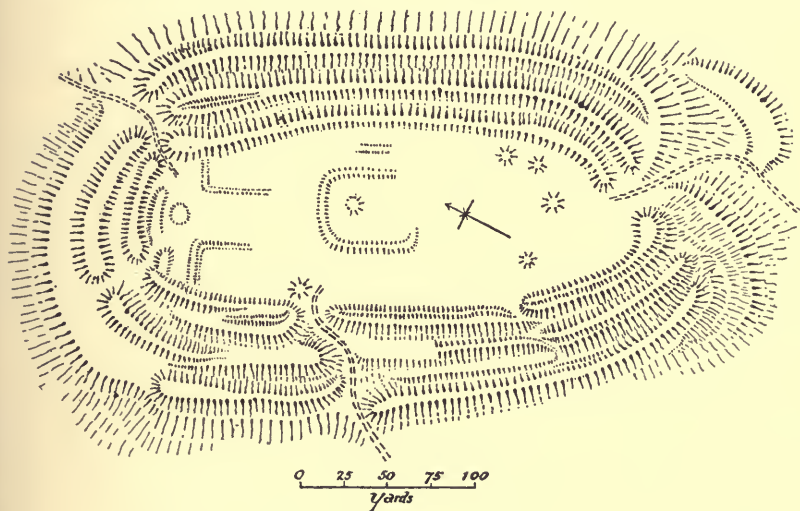


FIG. 20.—PILLEDON PEN.

east of Chesterblade. In shape an elongated oval lying east and west, and rather broader towards the east, where it connects with the higher ground, it measures over all 1115 feet by 500 feet, with an inner area of 5 acres. The defences are a double vallum with intervening fosse, on all sides but the east, where the valla are three and the fosses two. On this side there are two entrances, the larger near the centre, the smaller at the north-east corner, both original. Excavation went to show that the camp was occupied in the Bronze Age. No iron was found. From the number of interments which were discovered

within it, the excavator, Mr. St. George Gray,¹ declared it to be "a combination of camp and cemetery," and suggested that it was perhaps only used as a summer camp by its builders, who probably took their flocks hither from the lowlands during the hot weather. Neither conclusion seems convincing, and whatever may have been the builders' attitude towards their dead, it seems improbable that so much labour should have been spent upon a mere cattle-ring, which might have been sufficiently secured by a single vallum. It is perhaps not conclusively shown that the camp is of the same date as the interments.

Contour forts reach the perfection of symmetry when constructed upon isolated hills of conical shape. In such cases the plan frequently becomes to all intents a circle, or so little eccentric as to pass for a circle unless very carefully measured. Again, the chalk hills furnish the finest examples, and especially the Wiltshire and Dorsetshire Downs.

Badbury Rings (Fig. 21), $3\frac{3}{4}$ mile north-west of Wimborne, is an elliptical fortress defended by three valla and three ditches completely girdling a detached chalk hill (327 O.D.). The area, 400 yards in diameter at its widest, embraces 18 acres. The second or middle vallum runs closely parallel with the inmost rampart, but the third and outermost, a mile in circuit, is separated from the second by an interspace from 20 to 30 yards in breadth. This work Warne believed to be of later date than the others, but gives no reason. The banks rise from 30 to 40 feet above their ditches. The two entrances are to the east and the west. The former is a narrow opening cut direct through the three rings; the other was apparently in its original form analogous to the eastern gate of Maiden Castle, the middle vallum being thrown

¹ See his report in *Proc. Somersetshire Arch. Soc.*, vol. i. (1904).

forward in a kind of rectangular bastion 30 yards in depth and 140 yards in length, in front of the passage-way through the inmost ring, the path emerging at its southern corner to reach the outermost line of defence. At the present time gaps have been formed in the bastion and the third vallum immediately opposite that in the inmost vallum, but there can be no doubt that these openings are

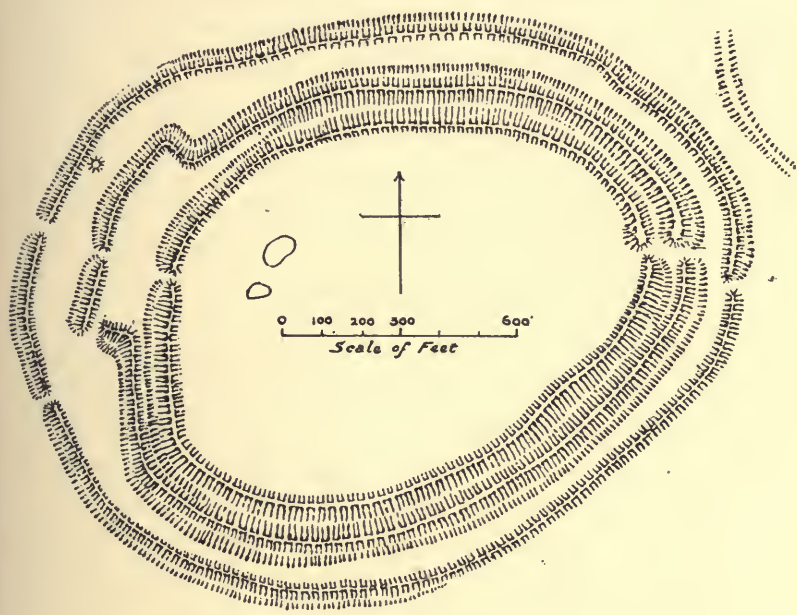


FIG. 21.—BADBURY RINGS.

not original. In the interspace before the bastion is a solitary mound. Within the area is a pond, and Aubrey declares that “at” this camp, as at Maiden Castle, there was a spring. Antiquities of Celtic and of Roman make have been found within the enceinte. Outside the north-western ramparts is the detached fragment of a vallum, of which the purpose is not evident, and Warne adds that there were “not far from the western entrance the remains of a circle of earth and other ancient vestiges.”

The camp, which commands a magnificent outlook as far as the Needles on the one hand and on the other up the valley of the Stour, stands upon the line of a Roman road running from Old Sarum to Poole Harbour, and from it radiated other such roads to Dorchester and towards Bath and Hod Hill. Dr. Guest identified it with the Mons Badonicus of Gildas, the scene of King Arthur's last and fatal victory over the Saxons under Cerdic in 520, but this view is traversed by Warne on the ground that Gildas explicitly declares Mount Badon to have been situate "near the Severn's mouth."¹ None the less, the Arthurian tradition lingers obstinately on the spot, and in view of the ancient superstition that the dead hero's soul passed into a raven until in the fulness of time it shall be re-embodied in human shape and "Arthur shall come again," it is curious to read that the solitary clump of trees which now crowns the hill was the haunt of the last pair of ravens to linger in Wessex. Legend apart, a certain amount of history attaches to the fortress. Here, on Alfred's death, Æthelwald the Ætheling mustered (901) his men to an abortive rebellion against the rightful heir, his cousin Eadward; and here in 1645 the "Clubmen" of Wiltshire and Dorsetshire, 4,000 strong, issued their proclamation against the Cromwellians. Badbury also gave its name to one of the thirty-nine ancient Hundreds of Dorsetshire.

The peculiarly wide berm observable at Badbury Rings is a feature of certain other camps of the west country, *e.g.* Cadbury Castle near Tiverton, Bury Castle above Sel-

¹ The passage is, however, declared to be of doubtful authenticity. The name of Badbury is not uncommon. It is an alternative name, *inter alia*, for Liddington Castle, near Chiseldon, 7 miles south-east of Swindon. This camp, circular, with an area of $7\frac{1}{2}$ acres and a rampart 40 feet high, has likewise been identified with Mons Badonicus. But Badonicus certainly seems to be related to Badon, *i.e.* Bath, and the Mons should seemingly be sought for somewhere in that vicinity, which is, in fact, "near Severn's mouth."

worthy, Shoulsbury Castle on Exmoor, and Old Burrow on Countisbury Head.

Cadbury Castle (Fig. 22), Devonshire, half-way between Crediton and Tiverton, is a strictly contour fort crowning a solitary hill of some 829 feet, unusually precipitous on every side except the east. The oval inner area is level, defended by a continuous rampart, excepting on the southern side, where there is no vallum, the ground falling in a sudden scarp of 25 feet to the level of a berm, a

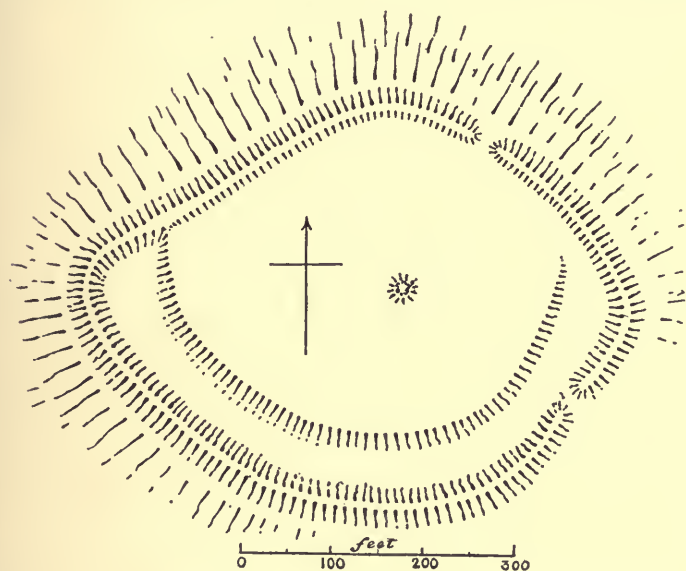


FIG. 22.—CADBURY CASTLE, TIVERTON.

terrace 50 feet in width, beyond which lies a tremendous vallum rising 20 feet above the berm. Berm and vallum together have a width of more than 100 feet. At either end this vallum is linked up with the containing wall of the inner area, which, owing to the nature of the ground, shows on the inward side a very slight relief (2 feet), but on the outer side has a slope of from 20 feet to 35 feet. At the north-eastern corner of the area a narrow passage-way communicates with the berm, and there are

larger entrances to the area on the north, and to the berm on the south-east. The whole plan is somewhat suggestive of an original promontory fort which has been subsequently improved into a contour fort. Within the area is a depression marking the mouth of a deep shaft.¹

Upon the flattened brow of a hill (700 feet) whose steep sides to the east and the south are covered by the famous Holnicote Woods overhanging the model village of Selworthy—the Hamlet in the Willows—once the domain of Harold's Queen Edith of the Swan's Neck, lies Bury Castle (Fig. 23). At the very extremity of the hill a vallum of earth and stone, perhaps 15 feet in height, with an outer fosse of proportionate width, runs round two-thirds of a circle, ending upon the abrupt edge of the slope. The area thus contained is less than 200 feet in diameter, and for a third of its circuit it has no defence beyond a slight additional scarping of the slope. The ditch has no parapet except for a few yards at the southern termination. Some 40 paces further to the west a second vallum, loftier than the first and furnished with a formidable outer fosse, covers the first-named work, though with less regularity of curve, disappearing in the same fashion at either end upon the slope. The second fosse seems to have had a parapet of small size, now defaced and altered to serve as a fence. The entrance seems to have been along the edge of the slope to the north, where there is still a hunters' path. At some considerable distance to the west may be made out the traces of yet a third vallum and fosse, of very much smaller proportions, curving in similar fashion across the saddle of the hill. This also has been much tampered with, and in part embodied in a now abandoned fence; but from its peculiar sweep, and other features, there can be small doubt of its being part of the original

¹ See further, p. 283.

works, although the ground hereabouts is much scarred with the remains of other fences unquestionably modern. Allowing for the difference in size, this camp bears a general resemblance to Winkelbury (Fig. 11).

At Shoulsbury Castle (Fig. 24) there is no trace of a third line of defence, but the plan of a double ceinture with a wide berm is adapted to the contour of a more or less rectangular hill-top rising 1528 feet above

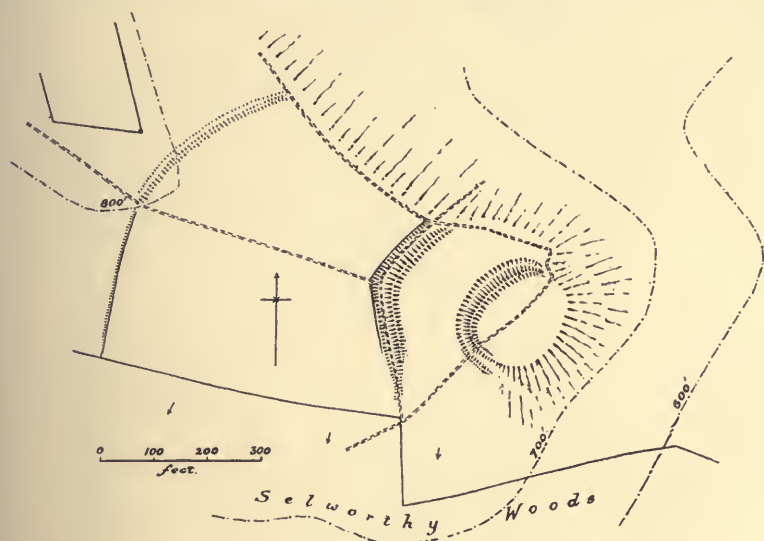


FIG. 23.—BURY CASTLE, SELWORTHY.

sea-level, and well known to stag-hunters as one of the most dreary and boggy parts of all Exmoor. Even in mid-August of exceptionally dry summers the immediate vicinity of the camp to north and east is a wet and unpleasant bog, densely grown with rushes and flecked with tell-tale cotton-grass. The area, a uniform level of something less than 5 acres, measuring about 160 yards by 145 yards, is enclosed to east and west by a rectilinear vallum, which is continued round the northern side in a depressed curve with rounded angles. Its height is greatest to the east, where the slope of the

approach is least difficult; elsewhere it varies in height from 4 feet to 7 feet only. On the southern side, which is again rectilinear, the fall of the hill makes needful no defence beyond a very considerable scarp, below which is a flat terrace; but on all other sides the vallum is covered by a shallow fosse, beyond which is a continuous berm varying in width from 12 paces on the north to

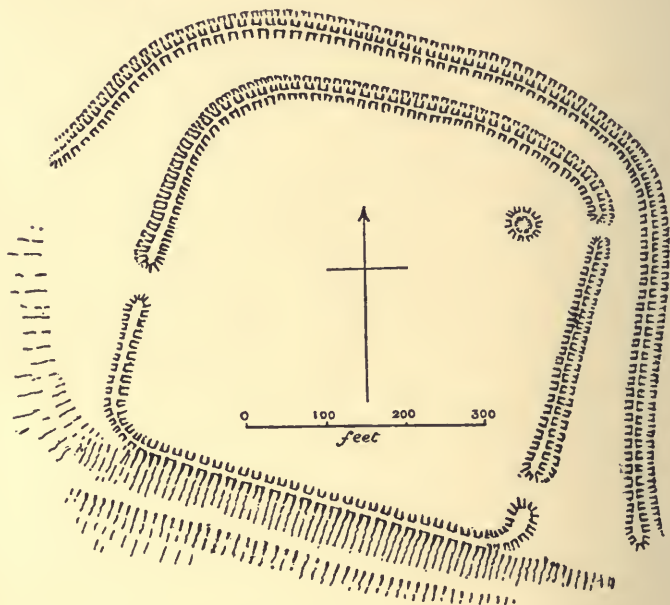


FIG. 24.—SHOULSBURY CASTLE.

18 on the west, and as much as 25 paces on the east. Beyond this again is a second slight vallum, not more than 3 feet or 4 feet in height, and a second fosse, both sweeping round the whole camp and ending upon the steep slope to the south. The measure of the defences over all varies from 60 feet to 150 feet.

There are entrances through the inner vallum near each of the southern angles, besides a gap at the north-east angle which is probably not original. The outer vallum

and fosse are continuous throughout, the only passage being along the edge of the slope. In the north-east corner of the area is a low mound which is said to have been opened. Mr. Page,¹ carried away by the local belief that this is a Roman camp—"the only undoubted Roman camp in the neighbourhood," as he was given to think—fancied the mound to mark the site of the prætorium. He records the tradition of the finding of "Roman" swords within the camp, but admits that the only one which he had seen was a cavalier's rapier. Like almost all camps of the west country, this reveals no vestige of pottery or other *débris* which might give a clue to its occupants, its builders, or its date.

The only reason for attributing Shoulsbury Castle to the Romans appears to be the partial rectangularity of the area, and the rectilineal plan of portions of the containing lines. Neither fact, however, has any bearing upon the question of its date, for even the pre-Roman population could, and constantly did, use right lines in their fortifications, and where the ground was quite open occasionally constructed camps almost perfectly rectangular.² There is no indication whatever of Roman work in the camp as it stands, in spite of the persistent belief of the neighbouring population. It may quite possibly have been constructed by Romanized Britons under Roman influence, but that is another matter. In point of fact, it does not appear that there is in the whole of North Devon or West Somerset a single camp which can be unhesitatingly declared to be a Roman work. Mr. Page, whose book contains a good deal of interesting information about the fortresses of Exmoor, likewise attributes to the Romans the fragmentary work called Road Castle, near Exford, but with even less reason, describing it as square, which it most certainly is not and never was.

¹ *An Exploration of Exmoor*, p. 101.

² Below, pp. 143, foll.

The camp called Cranbrook Castle (Fig. 25), near Moreton Hampstead, was somewhat similar in plan to Shoulsbury Castle, with the important difference that the inner fosse here runs more or less midway between the two valla, so as to leave a considerable berm in front and rear, the measure of the defences over all being 100 feet. On the north, where the ground falls away steeply, the works

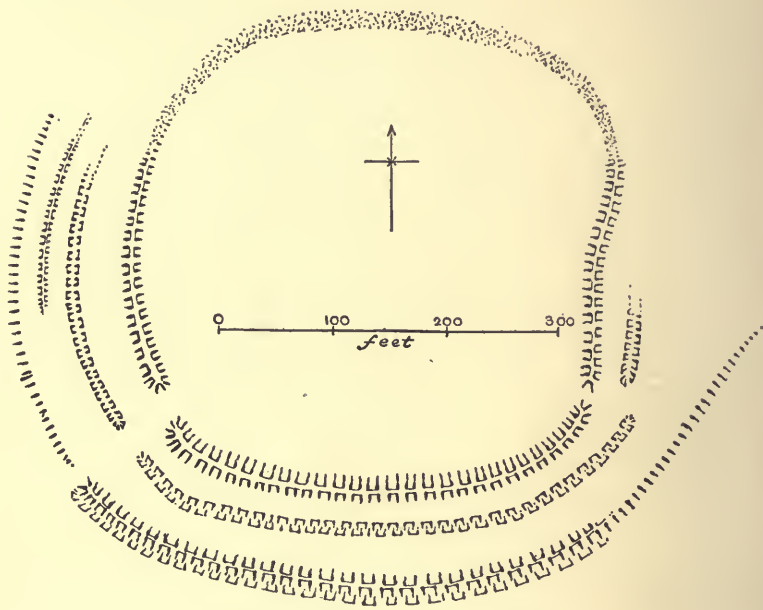


FIG. 25.—CRANBROOK CASTLE.

appear never to have been finished, but there remains a line of loose stone which seems to have been the commencement of an intended vallum.

In Old Burrow (1,100 feet) this design attains its perfect development, unspoiled by any obstructive natural features. The camp (Fig. 26)—if it really be a camp—crests a gently rounded hill overlooking the Riviera-like combe of Glenthorne and the Channel Sea. Entering from the seaward side (north), by the original entrance, one passes an outer fosse 4 feet wide and 4 feet deep, and a 9-foot

vallum, to an interspace some 16 yards in width, in the centre of which lies another enclosure. This, in shape approximately square with boldly rounded angles, and having an area only some 30 yards across, is defended by two valla and two ditches immediately contiguous. The inmost vallum rises in places 10 feet to 12 feet above the

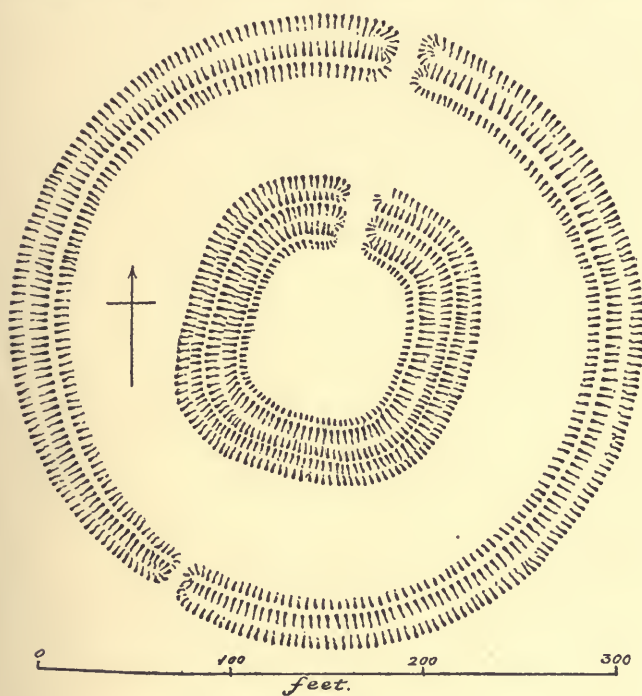


FIG. 26.—OLD BURROW.

area, with a fosse 15 feet wide from lip to lip. The second fosse has a width of 9 feet only from lip to lip, and the intervening vallum is nothing but a narrow bank of soil left *in situ*, its crest only 4 feet above the bottom of the fosse on either side. The whole work has a diameter of no more than 100 yards, and the measure of the defences over all is only about 100 feet.¹

¹ There is a gap in the outer ceinture at the south which is, perhaps, not an original entrance. J. C. Wall says (in *Victoria Co. Hist. Devonshire*) that "exactly in the centre of the camp is a small mound." If so, the deep growth of heather effectually conceals it in the summer.

It is not merely the exquisite view that gives to this camp its charm, although that ranges from the bare, rolling hills of Exmoor on the south to the mountains of South Wales on the north, from the Hangman in the west, eastward over Porlock Bay to Minehead, Brent Knoll, and the Mendips in the furthest distance, with the Severn Sea spread out at one's feet below. The camp itself is so perfect, so regular, so *mignon*, that it is positively a thing of beauty in its very design, and seen in high summer-time, when valla, fosses, and floor are alike covered with closest-grown heather and dwarf, wind-bitten gorse as with some gorgeous oriental carpet, the effect is nothing less than charming, and quite unlike that afforded by any other camp. The regular curve of the diminutive middle vallum, a very toy wall, nestling close to the foot of the inmost rampart, suggests in its glow of purple heather and golden gorse some exquisite effect of the gardener's art. True, this closely matted growth is more pleasant to look upon than to walk amongst, and is haunted, moreover, by overgrown humble-bees who resent most piquantly—*experto crede*—the wanderer's intrusion upon their fragrant preserves ; but as a thing to gaze upon Old Burrow would be delightful anywhere, and set amidst such surroundings it is a revelation. What secrets it may conceal is matter of speculation,¹ but even the cold-blooded curiosity of an antiquary might hesitate before lifting one sod and scoring one wound upon the face of a thing so dainty in its beauty.

Old Sarum (Fig. 27) is perhaps the most perfect exemplar of the circular contour-fortress, as it is unquestionably the

¹ Very possibly Old Burrow is rather sepulchral than military in character, as the alleged central mound would suggest. That it is of considerable age is shown by the manner in which it has been used as the central point of a whole series of enclosures, with the remains of which the hill is seamed. When the writer saw it, a large area of ground immediately adjoining it to the south-east had been recently stripped by peat-diggers, but the soil showed not the smallest trace of human handiwork, whether in stone or in pottery.

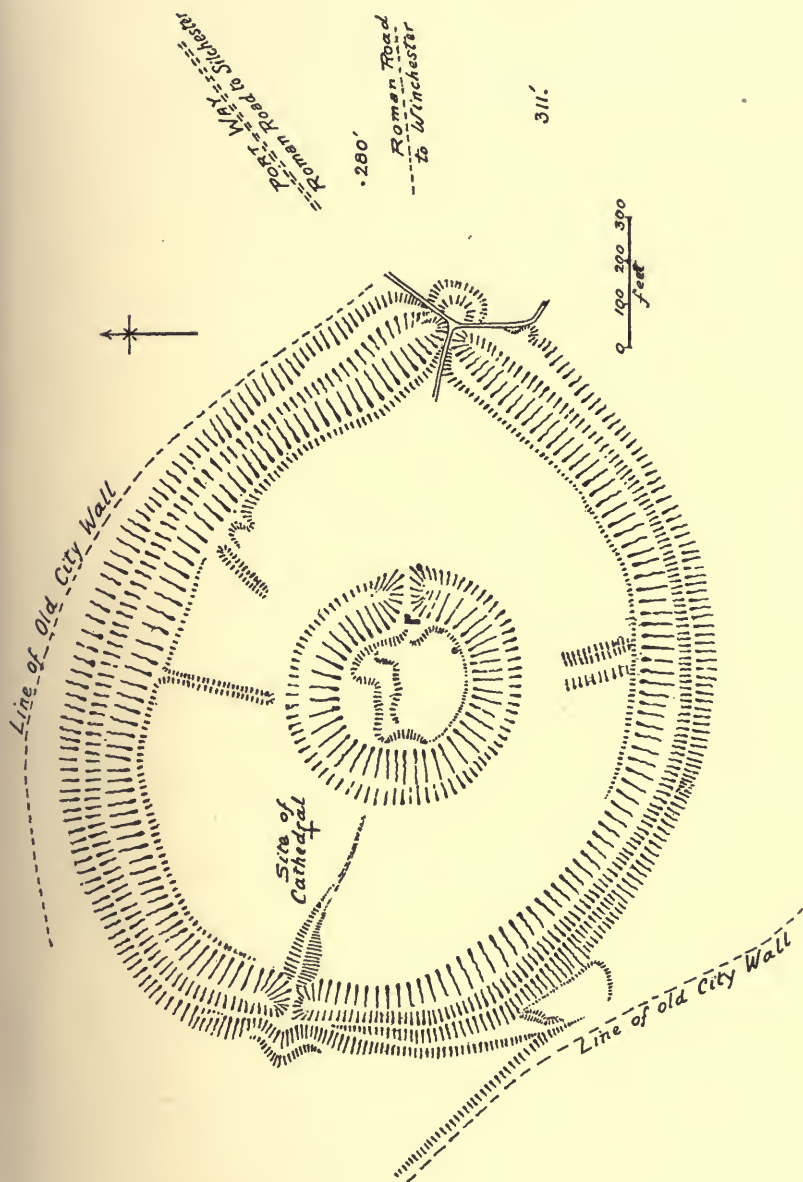


FIG. 27.—OLD SARUM.

most impressive. It is not, however, an original work of any one date. The site was occupied in succession by Celt, Roman, Saxon, and Norman. It was the centre of the Roman Road System of the west of Britain, and from it radiated roads to Silchester, Winchester, Badbury, Marlborough, and the Severn Sea, if not also directly to Bath. Held by the Romano-Britons for upwards of a century and a half, it fell in 552 to Cynric the Saxon, and was one of Alfred's strongest fortresses in his long struggle with the Danes. Beneath its walls in 1070 the Conqueror reviewed his troops, and hither in 1075 Bishop Herman transferred from Sherborne the see of Wessex. Seventeen years later was completed his cathedral. But within 150 years there had grown up a new Sarum, the modern Salisbury, and the older fortress passed quietly but quickly into the silence which mostly haunts it still. But it gathers from its desolation only an added grandeur. Pepys¹ the inquisitive saw the "great fortification" as he rode by, "and there light and to it and in it, and find it prodigious, so as to frighten one to be in it all alone at that time of night."

The fortress is literally carved out of a small conical hill overhanging the valley of the Avon, 2 miles north of Salisbury. The outer ditch, encircling the top of the hill, encloses an almost perfect oval of $27\frac{1}{2}$ acres. From the bottom of this ditch, which has a small parapet, the vallum springs up with baffling steepness to the amazing height of 106 feet. The area has long been given over to the plough, with the exception of the central portion, which is ringed about by a second ditch and a second vallum too immense for the keenest land-hunger to attack, for the bank here rises full 100 feet above the floor of the fosse. This inner vallum was once crested with a wall 12

¹ *Diary*, June 10th, 1668. The name Sarum originated in a misunderstood abbreviation of the Latin form *Sorbiodunum*.

feet in thickness, of flint laid in mortar and faced with stone, and within it was the Norman citadel. The entrances lie east and west. The former, as at Badbury, was of small dimensions; the latter, more important, opening upon the river-valley, is still protected by a horn-work.

Though successive occupations have obliterated all certain traces of the original Celtic works, there is no question that their plan also was oval, and that the outer ceinture now stands where the Celt first traced it. As to the age of the inner works, there is no certainty. From the analogy of similar camps elsewhere, *e.g.* the great fortress known as the Herefordshire Beacon, near Malvern (Fig. 28), it is commonly thought that they are of much later date, in fact post-Roman and probably Norman.¹ Yet the same plan, on a scale very little smaller, is to be seen at Weatherbury Castle (otherwise Milborne Rings), 7 miles south-west of Blandford, usually regarded as an original British work. Of actual Roman work at Old Sarum there is no vestige.

There is to be bought in Salisbury a most wonderful sheet

¹ To the adjacent work of Figsbury Ring (Fig. 193) the works at Sarum bear little or no analogy. Nor is there any reason to suppose the inner fosse to be a Saxon work: until proof to the contrary is forthcoming, it must be regarded as far too ambitious a piece of spade-work for the Saxon. Warne (*Ancient Dorset*) imagined that there was indeed a specimen of Saxon work almost as formidable in Castle Hill, Powerstock, immediately west of Eggardon. Here (Fig. 29) there is a spacious area of 12—13 acres enclosed within a steep scarp or a fosse, and a strong rampart. Within this, upon its northern side, was a continuous circular vallum of great strength embracing 4 acres, and within this again a circular dry moat, 30 feet wide and 7—10 feet deep. Local tradition asserts that Aethelstan had a palace there; and Warne believed the outer works to be of Celtic date, the inner Saxon. There is very little doubt that the inner works are in reality Norman, and very possibly the outer works as well. The entire plan tallies exactly with the recognised scheme of a Norman mount-and-bailey fortress, notably in the eccentric position of the inner stronghold. A Norman castle actually did occupy the site, and fragments of masonry remain there; while it is known that King John several times stayed there, and there is record of the removal of much masonry from above and below the surface.

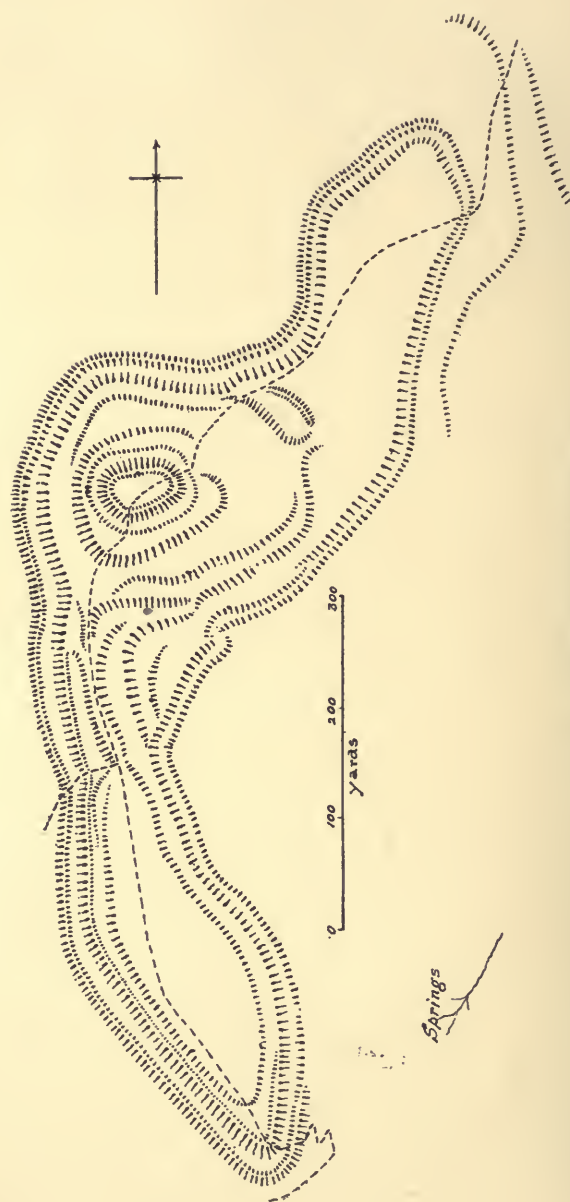


FIG. 28.—HEREFORDSHIRE BEACON.

entitled "An Exact Plan and Section of Old Sarum, also the Eastern View of that Ancient City as it then stood (*i.e.* before its reduction by the Saxons in 552)," all purporting to be "taken from the best authorities." The "plan" is that of a wheel drawn with mathematical precision, the citadel representing the hub, and radiating therefrom across the outer area ten rectilinear streets,

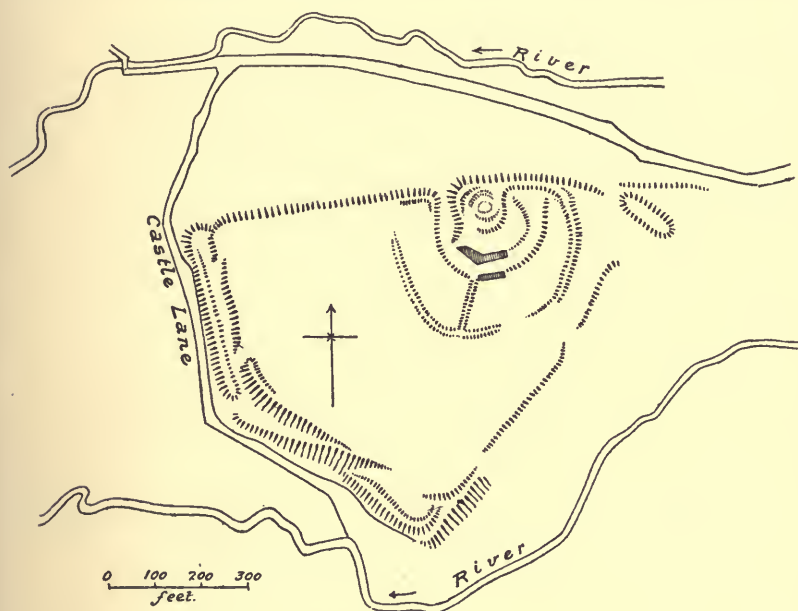


FIG. 29.—POWERSTOCK.

themselves in turn linked up by a perfectly circular street which cuts each at the middle. The positions of the gates and towers, the cathedral, the "palace of the clergy," the market-place, four wells, and—let it not be overlooked—an ice-house, are all carefully indicated, and a key-note kindly adds the names of the various thoroughfares:—Mary Street, Nicholas Street, Fish Row, Port Lane, Morsel Walk, Kingsbury Street, Queensgate Row, and so on. Finally, the four-sided spaces between street

and street were, it would seem, kept sacred from the builder and preserved as meadows. It was in fact a "Garden City" actualized 1400 years ago! It is greatly to be regretted that the "best authorities" did not take equal pains to perpetuate the details of other towns of the period.

With all its advantages of garden-ground, orderliness, and defensibility, and despite its four wells, Old Sarum did not prosper. It was, like Avignon, *cum vento fastidiosa, sine vento venenosa*; and its population lusted after the lush green meads and plenteous waters of the valley.¹ So the new Sarum grew apace and was chartered by Henry III as early as 1218, and the sealing of that charter sealed likewise the death-warrant of the older city. There remained to it of all its glories only the right to send two representatives to Parliament, a right which it asserted until the Reform Bill, lopping it of its members, left it as it is now—

Corpus vile suis et magni nominis umbra.

¹ The more immediate cause of its lack of prosperity was the rivalry between the clergy of the cathedral and the laity of the castle. They were too near neighbours to maintain even the pretence of friendliness.

CHAPTER V

PLATEAU FORTS AND SIMPLE ENCLOSURES

*"On the solitary pastures where our sheep
Half asleep
Tinkle homeward through the twilight, stray or stop
As they crop—
Was the site once of a city great and gay,
So they say."*

THE strength of the camps thus far described is largely due to their positions. In the case of promontory forts and hill-top forts this was indeed the primary consideration of the builders. In other cases, however, natural advantages of situation became of less importance, and one arrives finally at a series of earthworks in no appreciable degree depending upon their position as a factor in their defensibility.

Works of this class—they have been styled plateau forts for distinction—are of very various degrees of strength and dignity. Some of them, as their elaborate defences show, were certainly military works, and very formidable ones to boot. Others are so feeble, simple of plan, and small of area as to make it certain that they were intended less to defend man against his fellow man than to shelter his cattle and family from wild beasts—mere cattle-rings scarcely more defensible than a village

pound. And yet others are so small and weak that they would seem scarcely to have been defensive, in the usual sense of that word, at all. Some few of them have been proven to belong to the Bronze Age; others, and those among the finest of them, to the Late-Celtic time; and without doubt excavation would show some of them to belong actually to the historic period.¹

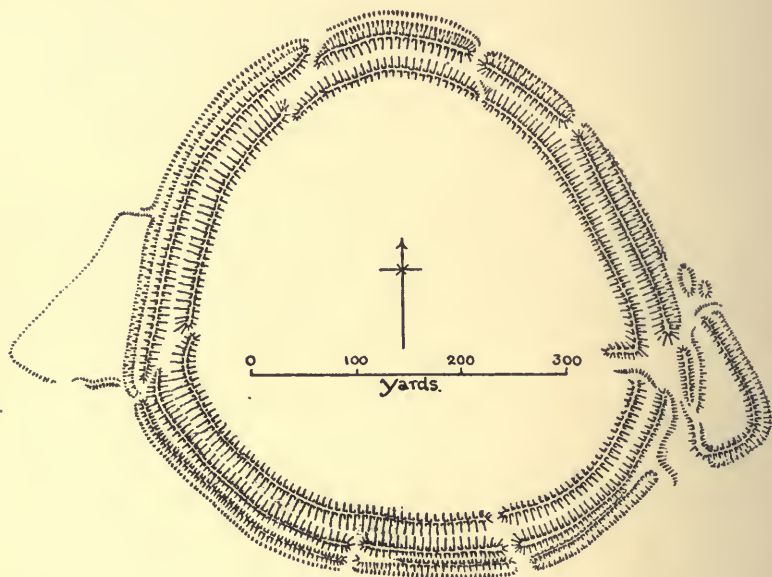


FIG. 30.—YARNBURY.

Yarnbury (Fig. 30), two and a half miles west of Winterbourne Stoke, Wilts, one of the strongest and best preserved examples of its class, covers an area of twenty acres. It is defended by three valla, and by two, or in

¹ For example, the Bawns described on p. 232, some of the Dartmoor pounds (p. 221), and similar enclosures elsewhere. Needless to say, not a few moated sites of mediæval date pass for "camps," British or Roman or otherwise, and there are cases in which the resemblance is considerable, *e.g.* the oval site at Walkingham Hall (Fig. 168), and that near Checkendon mentioned on p. 460: *Cp.* also the "Round Moat" at Fowlmere (p. 456, n.).

places three ditches, the inner vallum rising at some points as much as 50 feet above the fosse below. At the present time there are no less than six entrances, of which those to the east and the west are certainly original. Each is provided with outworks, of which those to the east are of the peculiar bastion-like plan already seen at Maiden Castle and at Badbury Rings. The western entrance cuts the lines of defence diagonally so as to be enfiladed throughout. The spot is the scene of a great horse-fair in October, and this doubtless explains there being now so many entrances to the area. It may possibly explain also, at least in part, the multitudinous trackways leading to the camp, though some of these are unquestionably ancient, coeval with the village-sites and pit-dwellings which abound on this bleak and lonely part of Salisbury Plain.

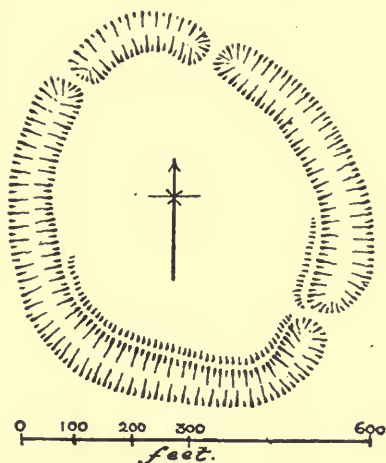


FIG. 31.—HUNSBURY.

Vandlebury, or Wandlebury, on the flat summit of the Gogmagog Hills, five miles south-east of Cambridge, is “rudely circular,” with a diameter of 1,000 feet, and the defences, though far less impressive, are very similar to those of Yarnbury, viz. three valla and two fosses. Within the area, now occupied by a residence of the Duke of Leeds, have been found coins both British and Roman. The camp at Hunsbury, Northants, is oval in plan, with an extreme length of 550 feet and extreme breadth of 410 feet; there is but one vallum, and a very large outer fosse upwards of 80 feet in width from lip to lip. Exploration has shown this camp to have been occupied in

the Late-Celtic period,¹ although locally known as the "Danes' Camp."

Ambresbury Banks—the derivation is supposed to be the Celtic *emrys*, "an enclosure," seen in more than one *Caer Emrys* and *Castell Emrys* in Wales, in Croft Ambrey (Herefordshire), and probably in Amesbury (Wiltshire)²—is more irregular in shape, with an extreme length of 800 feet, and a width of 520 feet. Its defences were never very formidable, and the single vallum, 36–40 feet wide at the base, is now reduced to as little as 9 feet in height. The ditch, which had a V-shaped section, was originally 10 feet deep and as much as 22 feet wide in places. Beyond the ditch was a parapet, or rather a second vallum, running round three sides of the camp where the fall of the ground was but slight. The works are now broken by as many as seven entrances. The camp has been explored by the Essex Field Club, and shown to be pre-Roman. Surrounded as it was until a late age by dense forest, of which Epping Forest is but the shrunken remnant, and by marshy ground, it occupies just such a position as Cæsar declares that the Britons selected for their *oppida*, and the comparative weakness of the earthworks suggest that the builders depended largely upon the natural features of fen and forest for their security. The widespread notion that Ambresbury Banks was the scene of

¹ It need hardly be said that the names of Hunsbury and Vandlebury have been solemnly derived from imaginary garrisons of Huns and Vandals supposed to have been there stationed by the Romans. Etymology was a delightfully simple matter half a century ago!

² At Hunton, Kent, is an earthwork known as Amsbury. The word *Emrys* early became confused with the name Ambrosius, and one or all of these fortresses came to be associated with the more or less dubious Aurelius Ambrosius, a British king of the Sixth Century, connected with the Arthurian Legend. The Anglo-Saxon form of Amesbury was Ambres-burh, which exactly represents the Celtic *Caer Emrys*. It is possible that Hembury, a very common name for camps in the West Country especially (there are at least three of the name in Devonshire), and Embury may embody the same Celtic original.

Boadicea's last fight is incapable of either proof or disproof. At any rate the camp was here in the unlucky queen's time.

Before deforestation and cultivation had destroyed them, there were several important works of this class in the south-eastern counties. The *oppidum* of Lingfield Mark is still recognizable; that known as Cæsar's Camp on Wimbledon Common has only lately been destroyed by

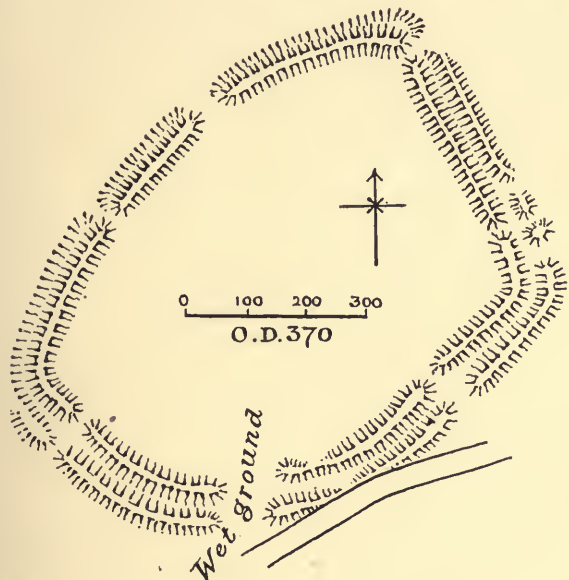


FIG. 32.—AMBRESBURY.

the modern builder. The grandest earthwork in Kent, perhaps, is the fragment of the great oval camp in Holwood Park, Keston, which once covered 100 acres of ground,¹ and must have been a truly formidable fortress. There would seem to have been a single fosse surrounding the whole, with a massive inner vallum and slighter parapet;

¹ Even larger (123 acres in extent and two miles round) was the Bronze Age camp called Oldbury, near Ightham, in the same county. This is of interest because the spot was occupied in yet earlier times. It has yielded quantities of palæolithic implements, amongst the finest of their kind.

and at the present day the vallum is in places 45 feet wide at the base, the fosse 30 feet wide. But at the north-eastern angle these defences are reinforced by a second fosse and parapet, which sweep round the whole of the northern face and rise to grand proportions at the entry, which fronts almost due north over Hayes Common, once the home of a teeming population whose dwellings are still traceable in the multitudinous pits that cover the ground. Here the triple ramparts show the customary inward curve; and while the floor of the second (outer) fosse is perhaps 20 feet below the crest of the parapet, and that of the inner fosse fully 30 feet below the crest of the inmost vallum, the banks appear to reach a still greater height owing to the rapid fall of the deeply-cut entrance-way. If this be really such an *oppidum* as Cæsar had to deal with when he traversed Cantium, it is easy to understand that only by the laborious method of the *agger* could his men cross the fosses and reach the last line of defence, crowned presumably by a stockade of proportionate strength. The local name for Holwood Camp is still The Bulwark.

It is remarkable that there are few camps of whatever type upon the higher elevations of the wet uplands of Yorkshire, and that far the greater number of the forts of the northern counties are built at elevations relatively slight, or even upon the lower slopes of the hills, defended less by their altitude than by the bogs which to this day are sufficient obstacle to deter most people from visiting them, and which a few centuries ago must have been all but impassable the year round. Two examples are here described.

On Roomer Common (350 O.D.), a mile south of Masham,¹ is a peculiar little camp (Fig. 33), about 80 paces

¹ This district was under the control of the powerful and restless Mowbrays, whose principal stronghold was at Kirkby Malzeard, only three miles to the south. It has been suggested, therefore, that this camp (locally, of course,

long, 65 paces wide, and 610 feet in circuit. It lies upon a gentle slope facing to the north-east, on a sandy peat, an

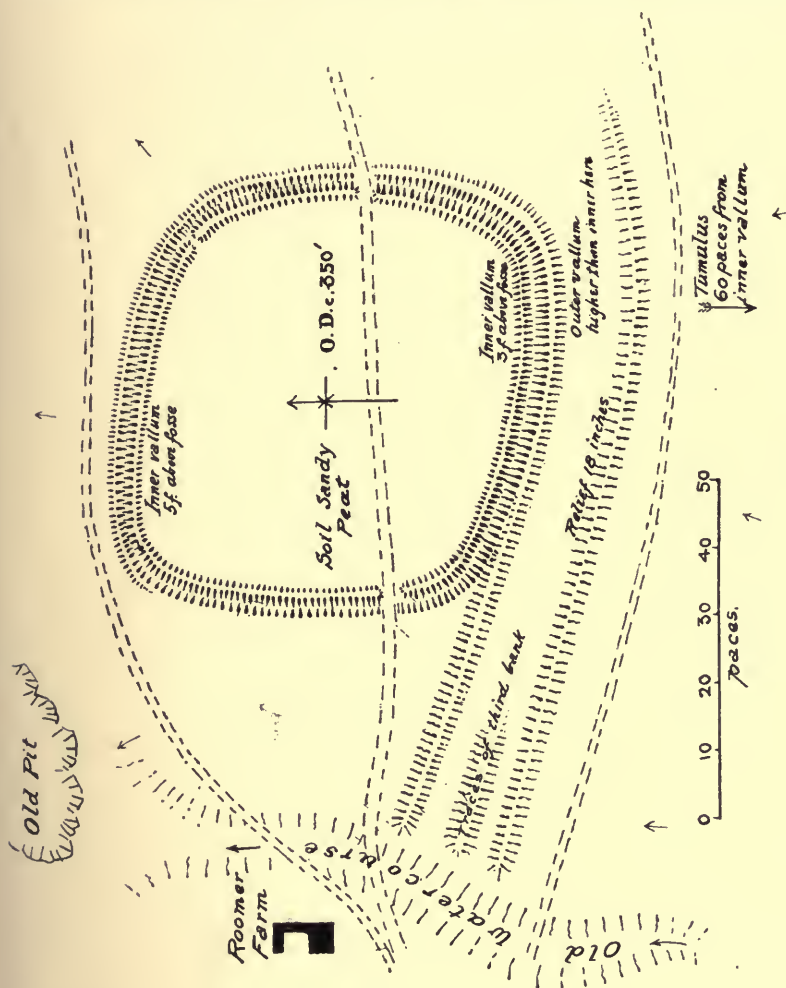


FIG. 33.—ROOMER.

old watercourse (now dry) covering its western flank. The

called Roman) may have had something to do with their activities. On the other hand, there appears to have been a Roman road close at hand, and the significant names of Aldbrough and Mowbray's Ford both attach to a spot upon the banks of the Ure less than a mile away. But there is no Roman look about it. The undoubtedly Roman work at Grewelthorpe (Fig. 101) lies about a mile to the southward.

defences consist of a slight vallum, nowhere more than 2 feet above the area, a very regular 15 feet ditch with V-shaped section, and a parapet. These lines are best preserved on the north side, where the vallum is, at its highest, some 5 feet above the floor of the ditch, and the parapet is well defined. On the western side there is no parapet, and vallum and fosse are both very slight. On the southern side the parapet is continued tangentially beyond the south-west angle for a distance of 40 paces to the edge of the watercourse, and parallel with it at a distance of 27 feet runs a second vallum with very slight relief, which ends at the same point to the west, but to the east is prolonged for 10 paces beyond the angle of the camp. Between this second vallum and the parapet on this side are traces of what may once have been yet another bank, but the ground is too much cut up by cart-tracks to allow of certainty. Owing to the gradual rise of the ground, these outer works, slight though they are, are somewhat higher than the crest of the inner vallum. Sixty paces south of the south-eastern angle is a small tumulus, but the area and the adjacent ground are otherwise apparently undisturbed. The ditch can never have held water, and the whole work can never have been of any great strength.

On Hawsett Moor, 500 yards north of the Shooter's Inn on the road from Ripon (10 miles) to Ramsgill (4 miles), and on the edge of the famous Dallowgill grouse-moors, is a larger and stronger work (Fig. 34). Like the last-named it lies near the foot of a gentle slope (*circa* 850 O.D.), between Abbeyshaw Dyke on the north, and a smaller stream immediately under its southern defences; while a third watercourse traverses the area from west to east. The southern defences follow a regular curve; those to west and north are rectilinear with a curving angle; on the fourth (eastern) side there are discoverable only the faintest traces of a rectilinear *agger* of loose

stone. The entire circuit is about 280 paces. The defences upon the south side consisted of a vallum of earth and stone, covered by a broad, clear-cut fosse 25 feet in width, and varying from 4 to 10 feet in depth below the vallum and the parapet. There was an entrance near the middle, through which passes a turf-cutter's track, and

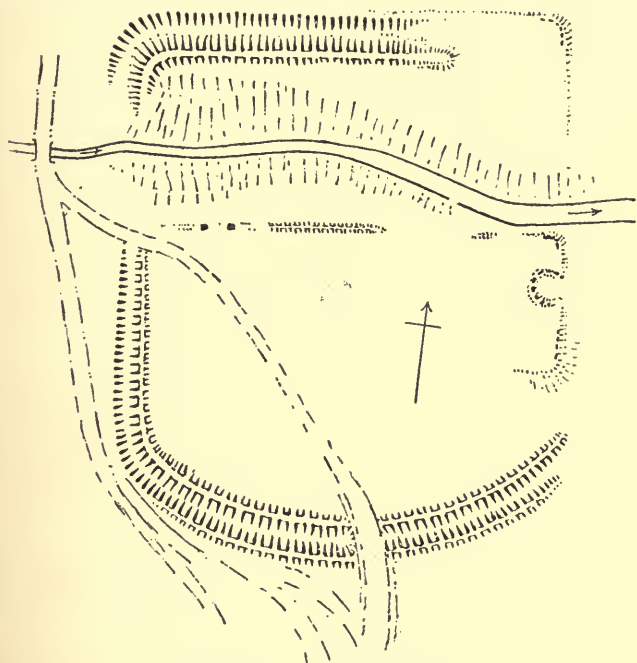


FIG. 34.—HAWSETT MOOR.

other such tracks have in part defaced the works about the south-west corner, so that it is impossible to say whether there was any parapet at this point. On the west the ditch would seem to have been once wet, for it is filled with rushes. As it approaches the old watercourse it disappears, as does the inner vallum also for some 20 paces, but reappears on the opposite bank of the stream and runs eastward in a right line to disappear on the gradual fall of the ground. The parapet here

is very slight, and the inner vallum is in reality only a strip of natural soil left *in situ* between the watercourse and the fosse, which is here quite dry, 21 feet wide, and about 10 feet deep. On the eastern side, about the midmost point of the probable line of the stone wall which seems to have stood there, are the vestiges of a circular enclosure of stone about 9 yards in diameter. All over the open ground to the north and north-west lie the remains of stone walls and enclosures, distinct enough to be obvious, but terribly mutilated by the removal of the stones to build grouse-butts, or for other purposes. There is no clue to their date, but the stones employed are too large to be of modern emplacement. The watercourse which traverses the camp still keeps a slight flow of water even in summer time; in winter time the camp must be all but inaccessible still, and it is so densely overgrown with bracken and heather as to be scarcely discoverable. The disposition of the northern defences in relation to the watercourse is remarkable: as the fosse lies too near the stream to add any appreciable area to the camp, it must unquestionably have been designed simply to bring the stream within the area.¹

The so called Danes' Camp² (Fig. 35) at Cholesbury

¹ Waulud's (in O.M., Wanlud's) Bank (370 O.D.), near Luton, is another example of a camp traversed by a stream (the river Lea); but this, now all but obliterated, was a far more extensive work than that on Hawsett Moor, and shows no such peculiar arrangement of the vallum in regard to the stream. It has a parallel rather in the great *oppidum Cassivellauni* at St. Albans.

² Locally it is known merely as The Bury. Within the area is a good pond (the soil is clay over chalk), and a church dedicated to St. Lawrence. At West Wycombe in the same county is another church of St. Lawrence standing within a ring-work crowning the hill, and remarkable for its defences. These consist of one fine fosse with a relatively slight vallum on the inner side, and on the outer side a much finer vallum. The work is a fragment only, having been greatly damaged in the rebuilding of the church (originally of the thirteenth century) by Sir F. Dashwood in 1763. The section now remaining is curiously regular in its formation, the grass-grown outer vallum having a broad flat top as level as a garden-walk. The entire area is occupied

(anciently Chelwoldsbury), in Buckinghamshire (600 feet), is 290 yards long by 210 yards wide, covers upwards of 12 acres, and is defended by a fine vallum with an outward slope of fully 20 feet, a wide ditch, and a parapet of considerable height in places. Like Ambresbury Banks, this was perhaps an *oppidum*, for it stands within an area

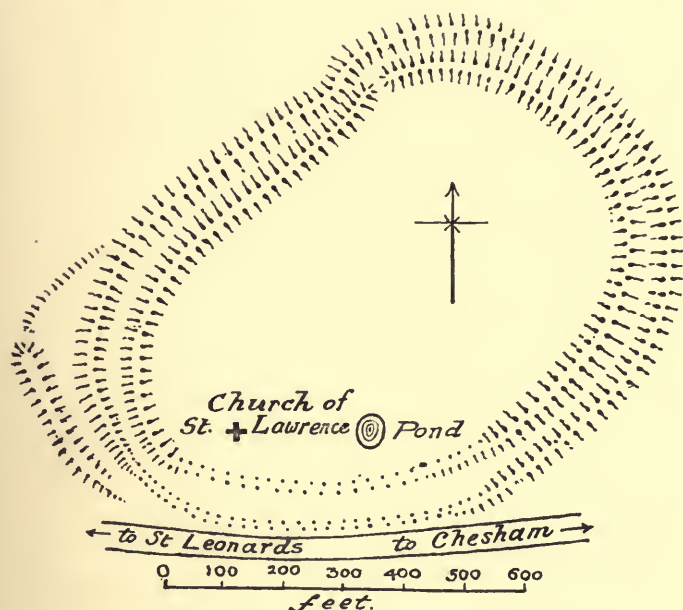


FIG. 35.—CHOLESBURY.

which was, until recent years, densely forested. A mile and a half to the south-east, at Hawridge, is another camp, an almost perfect circle of very small size, the diameter of the area being no more than 150 feet. The defences seem to be out of all proportion to the size of

by the church and churchyard, so that it may be concluded that these works were not raised to protect any residence within them, but antedate the church. The spot has great strategic importance, commanding three valleys which here converge, and for this reason, as also for the characteristic scarping of the steep western or southern sides of the camp, it is probable that the camp is a British work.

the camp, the fosse reaching a width of over 20 feet, and the vallum, 36 feet wide at the base, rising to a height of 12 feet above the area. Much of the enceinte has, however, been destroyed to make room for the buildings of Hawridge Court.¹ Bronze implements are said to have been found at the spot, while peculiarly delicate flakes and needles of flint are abundant at Cholesbury.

It is quite possible that Hawridge Camp, which overlooks the valley leading up to the higher ground about Cholesbury, was constructed as an outpost to the latter fortress. Similar works, showing the same combination of great strength with very limited area, are, however, to be found all over the country, in localities where there is often no trace of any larger camp. The fort known as Maiden Castle, or Caerthannoc, near Dunmallet, has a diameter of 82 yards, and is provided with two ramparts, the intervening fosse being 18 feet wide. Another example in Cumberland, Hayton Castle Hill, of exactly similar plan, measures but 40 yards across; while a third, called Tower Tye, near Naworth Castle, is 50 yards in diameter, with a single vallum of quite exaggerated proportions. A Hampshire example, at Wootton St. Lawrence, though only 50 yards across, has a rampart approaching 40 feet up the slope.² At Bury Hill, Dulverton, overlooking the junction of the valleys of the Exe and the

¹ At the present time water stands in part of the fosse, but it is not clear that the ditch was originally intended to be a wet moat.

² At Oving, Bucks, is a curious earthwork, the remains of a ring-work of about 40 paces only in diameter, surrounded by a ditch. The vallum and the fosse must have been of very great size before the plough attacked them. The crest of the ramp is still 8 feet above the floor of the fosse, and the slope measures as much as 23 feet. Apparently there was never either fosse or vallum along the western side, where the ground falls with great steepness to a spring—the Horse Spring—traditionally associated with Horsa. The work seems to be alluded to in a deed *temp.* Edward I., as being already under cultivation. The expression used is *Les Wawes*, “the walls.” It is too small to have been part of the village stockade, and can only have enclosed a single residence.

Hartford Water, in a position precisely analogous to that of West Wycombe Camp, is a formidable little fortress of very small area, but with a tremendous vallum; and a chain of similar small ring-works lies, or lay, along the northern edge of the Somersetshire highlands overlooking the Severn Sea. In Dunster Park is a beautiful little example (Fig. 69) in a remarkable state of preservation—a perfect circle of a diameter of 210 feet, lying upon the open slope of a hill facing towards Exmoor up the valley of the Avill. Its vallum of stone and earth, 10 feet in height and heavily fossed, is strongly recurved and splayed at the only entrance. This fort lies $\frac{1}{4}$ mile west of a much larger camp of totally different type, and very much would be gained if it could be proved that the one and the other were works of the same age. It has been suggested that the ring-forts in this locality were the work of the Saxons and intended as so many coast-guard posts to block the various valleys leading into the interior against the invading Danes, and it is likely that the Saxons did construct works of this type. A small oval fortress $1\frac{1}{2}$ miles south-west of Porlock Church is traditionally associated either with the Danes or with the Saxons, and the tradition gains a certain probability from the fact that the spot is thrice recorded to have been the scene of fighting in the Saxon time. This camp is very deeply entrenched, and shows but one entrance (on the south side). In plain truth, simple ring-forts do not present any features by which their age can be even guessed; the type was perhaps common to Celt, Saxon, Dane, and Norman equally. In the dead level of the fens, 7 miles north of Cambridge, is a circular ring-work known as Belsar's (or Balsar's) Hill, between Rampton and Willingham. It is "supposed to derive its name from Belasis, a commander under William I.," and it certainly lies at an exceptionally low level (18 feet). If it already existed it may have been reoccupied during

the Conqueror's operations against the Isle of Ely. But what is its original date it is impossible to say.¹

Simple ring-works, mostly of small area and of much slighter construction, are even more abundant. There are few counties in which examples are not to be found. Codford Circle, or Oldbury Camp, cresting a hill $3\frac{1}{2}$ miles due west of Yarnbury, Wilts, an unbroken circle of some 9 acres, is one of the larger examples. At the present time its vallum has to all intents disappeared, but it is clear that the work can never have been very strong. On Heale Hill, in the same county, overlooking the Avon valley, is another, smaller (5 acres) and less regular, with a British village adjacent. Others are (or were) to be found on Whitesheet Hill, Rodmead Down, and Pewsey Hill, where there were two close together.² They are numerous in Cumberland, and especially in the Furness district, and mostly of small size. One at Torver Beck is but 54 feet in diameter, without discernible fosse or entrance. Another on Hare Crag, in the same locality, is 100 feet across, with an entrance to the south-east; and yet a third, on Kirkby Moor, is 75 feet over, with a vallum 3 feet high. A round fort on How Hill is but 60 feet across, while a "Maiden Castle" near Burnmoor Tarn is said to be only 21 feet in diameter. There were others on Greenhalgh Hill near Slack (50 feet over), and near Penistone (100 paces across);³ while in Wharfedale occur

¹ This camp, like the later work at Earith (Fig. 207), is built upon one of the clay islands amidst the peat. Prof. McK. Hughes believes it to be British, and thinks that the association with Belasis may have arisen simply from the fact that that commander marched by the camp in passing towards the Isle of Ely along the old road called Aldreth Causeway. The work does not look as if it had ever been very formidable, resembling a cattle-ring rather than a camp.

² These examples are mentioned (amongst others) in Hoare's *Ancient Wilts.*

³ *Viz.*, at Heath Hall, and at Langsett, 3 miles west. One of these was oval. These have been incorrectly cited of late as examples of those comparatively rare enclosures in which the fosse lies *within* the vallum; but a

two examples in close proximity, covered by extensive outlying banks of small relief. Some of these very possibly were originally built as disc-barrows,¹ while others were probably residential, representing the homesteads of little groups of pastoral folk, who built them as folds for their cattle. They thus merge into those small and feeble circular enclosures of very slight relief, with areas little more than 20 feet in diameter, banks 8 feet to 9 feet broad, and shallow fosses 5 feet to 7 feet wide, which are to be seen, *e.g.*, within the the great camp on Hod Hill, usually surrounding one, two, or three pits (Fig. 36). When explored these were found to be the sites of huts of the Late-Celtic period.²

Two camps of this class have quite recently been detected and carefully examined, viz. one at Wallington, near Croydon, and another known as War Ditches, near Cherry Hinton, Cambridge.

few years ago both vallum and countervallum were still quite recognisable (Armitage, *A Key to English Antiquities*, p. 43). Where an earthwork has originally had both vallum and countervallum, it not infrequently happens that the plough has destroyed the former, while it has spared the latter, thus giving rise to the erroneous idea that no inner bank ever existed, and that the countervallum was the only defence. A similar confusion occurs in the case of many dykes.

¹ *E.g.* the example cited on Kirkby Moor. It goes by the name of "The Kirk," and "a venerable inhabitant" (*Archaeologia*, liii.) could recollect that it had once borne a peristalith. The natives assert that the spot was traditionally "a place where their fathers worshipped," and, as a matter of fact, games used, until recent times, to be held on the spot by the Lord of the Manor at Eastertide—a curious instance of what might conceivably be a confused survival of old traditions of some form of astronomical worship and of funeral games about a sepulchre. It may, however, be nothing but a piece of unconscious ætiology; it proves nothing, although it suggests much. A certain number of facts are known which illustrate the possible survival to the present time of beliefs and practice of undateable antiquity, associated with camps and barrows, especially where the Celtic element is strong, *e.g.* in Cornwall, Wales, and Brittany; but unhappily they are mostly too vague and perplexed to be more than suggestions. Something further is said below (p. 593, note) about the names "Kirk," "Church," &c., in connexion with earthworks.

² *Archaeol. Journal*, vol. lix. (1900).

Wallington¹ Camp (344 feet), of which every trace had so long since disappeared from the surface that the very tradition of its existence was lost, was discovered by the opening of its fosse in digging for the foundations of the new Southern Hospital (1902). It was proved to have been a circular fort 500 feet in diameter, enclosing something over 4 acres. The ditch, which was V-shaped in section, 12 feet in width at the surface, and

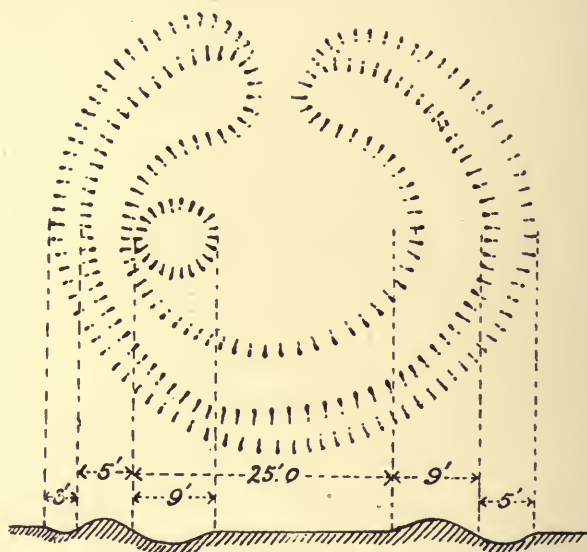


FIG. 36.—RING-WORK, HOD HILL.

7 feet in depth, had been completely filled in by the wastage and the ploughing of centuries, and the vallum had of course vanished beyond reconstruction; but from the objects found it was possible to suggest a reconstitution of the character and history of the camp. Its

¹ In Domesday, Waletton, *i.e.* Wall-town, although the name perhaps refers to some later walled town which superseded the British camp destroyed *circa* 50 B.C. It is known that there were Roman settlements near, and somewhere in this district lay the Roman Noviomagus, the name of which declares that it represented an earlier British town, not necessarily the camp under discussion, but perhaps its later representative.

original occupants, and presumably its builders, were little removed from the Stone Age. It had been occupied, whether continuously or not, down to a period synchronous with Caesar's invasion of Britain, when it seems to have been abandoned and destroyed. It yielded the usual quantities of pottery, including some four-handled vessels of an unusual type. Some of the pottery was apparently of foreign origin, as were also a diorite hammer and an amber bead. Flint implements, mealing stones, spinning whorls, and carbonized grains of wheat and barley were found, pieces of copper in the lump, and a lance-head of bronze, but no iron whatever. The few objects of Roman age discovered were surface deposits of later date. A number of cremated interments, and one uncremated, were found outside the area, and upon the surface of the area were discovered the traces of two hearths, while many more were located in the ditch. Accompanying them were a number of flat tiles of much-fired clay pierced with irregular holes, evidently griddles upon which rested the cooking-pots above the flames.¹

The camp at Cherry Hinton, albeit long destroyed, had nevertheless left a tradition of its existence in the name of War Ditches locally attaching to the site. It was brought to light in the course of quarrying for chalk, which revealed a section of the ditch. Like the camp at Wallington it was a circular ring-work, slightly smaller in area, but more strongly defended, for the ditch (which showed a funnel-shaped section with a flat bottom) was 14 feet to 15 feet deep and 15 feet wide at the surface. The finds were of an extraordinarily perplexing character, but such as to establish the date of the original ditch as long prior to the Roman age, the work of a people who had little pottery and hardly any other domestic

¹ The camp was explored, so far as was possible, by N. F. Robartes, F.G.S., from whose report (printed in the *Journal of the Anthropological Institute*, 1905) these facts are taken.

appliances. To these succeeded a population whose skulls, found in the *débris* which had already partially filled up the ditch, were "of Anglian type, which may well be explained by referring them to the pre-Roman Teutonic invaders of Britain." The camp seems to have been alternately occupied and abandoned through a long period of years onward to a date subsequent to the departure of the Romans: "The last occupation of the War Ditches seems to be later than the distinctively Roman period, but earlier than anything we can refer to the Saxon or the Dane, that is to say, we should refer it to the Romanized natives, who were in this district largely of Teutonic origin."¹

The circumstances under which these two camps were brought to light suggest that there may be many more yet awaiting discovery, and prove also that the absence of any vestiges of earthworks above the surface is no proof that no earthworks ever existed in the locality. Unfortunately, it needs the eye of a trained scientist to detect the slight indications which might betray these long-buried secrets; and scientists of the right kind are few, while the operations of the navy and the quarryman are manifold. For one that is detected, probably many more escape detection altogether, and are irrevocably destroyed. The cases of Wallington and War Ditches are interesting, further, as proving that even in very remote times camps of the simplest and less defensible type were constructed; that the original works of such camps sometimes continued to do duty, without addition or elaboration, during many centuries; and that a site, once occupied and fortified, continued to draw to it successive occupants through hundreds of years, in spite of conquest and reconquest, and all the ceaseless flux of local populations and conditions.

¹ The quotations are from the pen of Prof. T. McKenny Hughes, in his report upon the exploration of the camp in *Proc. Camb. Antiq. Society*, No. xlv., p. 452 *sqq.*

So many of the plateau forts conform so closely to the circular plan that this can hardly be a matter of accident, but must rather be set down to the fact that their builders had arrived at the knowledge that, as compared with any other form of enclosure, the circular plan is the most economical.¹ There appears to be reason to hold that, the topographical conditions being the same, circular camps are presumably later in date than others, the strictly rectangular Roman *castra* of course excepted. Nevertheless, mere shape must always be a most unreliable test of age. The old conviction that all rectangular camps, wherever placed, must necessarily be Roman was completely upset by the excavations of Pitt-Rivers, and is now entirely discredited in England. In Scotland, according to Dr. Christison's view, of a total of more than eighty rectilinear and chiefly rectangular works commonly described as Roman, only seven have furnished any relics to bear out this attribution.² Admitting that it were true (and it is not) that the Romans never adopted any but a strictly rectangular plan, such an admission does not justify the fallacious assumption that therefore none but Romans ever used such a plan. It was certainly employed occasionally by the Britons and by the Normans, it was the common plan in vogue for the domestic and military earthworks of the Middle Ages, and it was possibly not unknown even to the earliest Saxons.

Pitt-Rivers excavated three more or less rectangular entrenchments at Martin Down, Handley Hill, and Rushmore Park, all situated in or near Cranborne Chase and within a few miles of one another. Martin Down Camp (Fig. 37) was a rough rectangle of 97 by 80 yards (= 1.6 acre more or less), enclosed within a single vallum

¹ As compared with a rectangular circumvallation, a circular ring-wall of precisely the same length encloses an area more than one-third as large again.

² *Early Fortifications of Scotland*, p. 102.

and an outer ditch. The ditch had originally had a depth of 9 feet or more, with a width at the surface of 10 feet, and a funnel-shaped section; but, owing to the steepness of the sides, the vallum had almost entirely fallen into the ditch, so filling it up that the enceinte of the whole camp was scarcely noticeable to an untrained eye. Along one half of the longest side neither vallum nor ditch had ever been constructed. Entrances had been left in two other

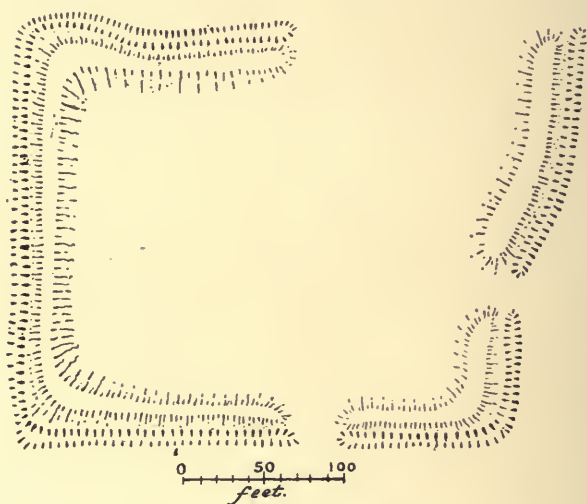


FIG. 37.—MARTIN DOWN.

sides, roughly analogous to those characteristic of Roman camps. From the evidence of the various objects found on the site, this work was shown to have been originally of the Bronze Age.¹

The enclosure in Rushmore Park, known as the South Lodge Camp, was three-quarters of an acre in extent only,

¹ "Subsequently occupied by the Romans," adds Pitt-Rivers. But of occupation in the proper sense there was no evidence, and the remains of Roman character there found were merely "surface-finds," quite as well attributed to the post-Roman Britons. See *Excavations in Cranborne Chase*, vol. iv., for this camp, and for those at Handley Hill and Rushmore Park, *ibid.*, vols. iv. and ii.

approximately a square of 60 yards. Here again denudation had all but obliterated the works, but excavation revealed a ditch, continuous throughout save for an entrance in the south-west side, with an average width at the surface of $9\frac{1}{2}$ feet, and a depth of $6\frac{1}{2}$ feet, the bottom narrowing to a width of 1 foot only, and the sides very steep. Systematic examination of the whole area revealed no traces of pits or other form of habitation, but fixed the date of this work again as of the Bronze Age.

Handley Hill Camp,¹ the most regular in plan of all three, was still smaller in size, measuring but 33 yards square and including only .225 acre. Here again the relief of the vallum was very slight. The single entrance was in the middle of one side, and the ditch (most unusually) was within the vallum. Its width had originally been but 2 feet. Within the substance of the vallum were found various Romano-British remains, and on the original surface beneath it lay a silver *denarius* of Trajan, but the objects found within the area were exclusively British in character.

Handley Hill Camp is one of a number of small rectangular earthworks, of doubtful age and purpose, enumerated by Warne.¹ Owing to their small size such

¹ *Ancient Dorset*, p. 334 sq. Arranged in order of size, the others are as follows :—

Gussage Little Down . . .	(9 × 8 yards) =	72 square yards.
Bockley Down . . .	(15 × 15 „) =	225 „
Chaldon West . . .	(32 × 32 „) =	1,024 „
Upper Sydling Down . . .	(40 × 30 „) =	1,200 „
Gussage Down . . .	(35 × 35 „) =	1,225 „
Eastbury Down . . .	(44 × 29 „) =	1,276 „
Milborne Down . . .	(51 × 38 „) =	1,938 „
Bere Heath . . .	(45 × 45 „) =	2,025 „
Bowcombe . . .	(45 × 45 „) =	2,025 „
Heath Rough Down . . .	(50 × 50 „) =	2,500 „
Ower Heath . . .	(55 × 55 „) =	3,025 „
Blandford Race Down . . .	(75 × 75 „) =	5,625 „
Steepleton Down . . .	(112 × 52 „) =	5,824 „

The work on Eastbury Down, says Warne, like Handley Hill Camp, had its ditch within the vallum.

works have been very little noticed, though they are certainly to be found all over the country. Two instances from Kent are Castle Rough and Bayford Castle, on opposite banks of Milton Creek, north of Sittingbourne, traditionally said to be the work of the Danes and of King Alfred. Three others on Walton Heath, Surrey, are

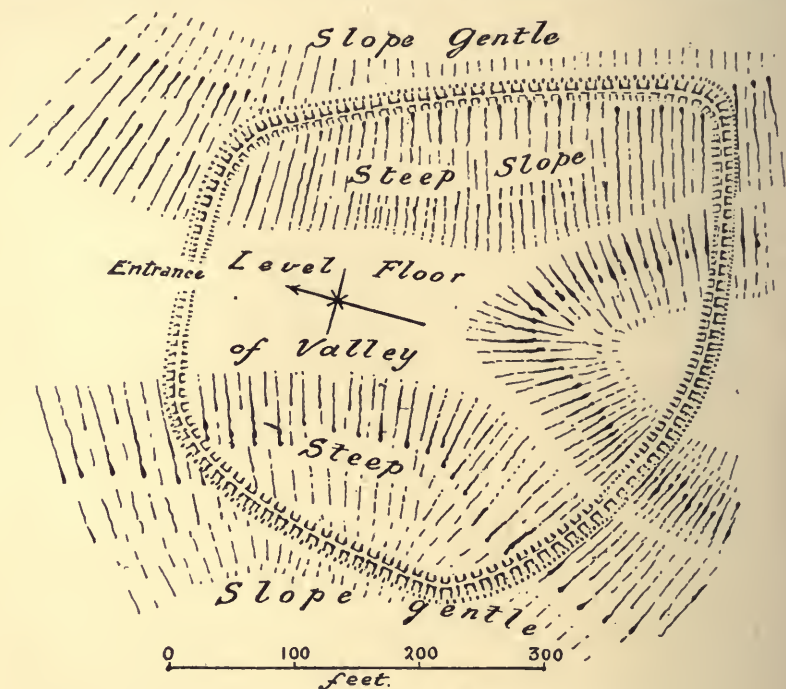


FIG. 38.—ENCLOSURE IN LOOSE BOTTOM, FALMER.

noticed on p. 316. There are many in Wiltshire in the neighbourhood of Stonehenge, and many in the northern counties. Three examples in the vicinity of the great Roman camps of Cawthorn measure respectively 200 feet by 200 feet, 220 feet by 220 feet, and 220 feet by 180 feet; while others on Cumwhitton Common and Penrith Common, Cumberland, measure only 60 feet each way.

Such works as these are wrongly called "camps": they

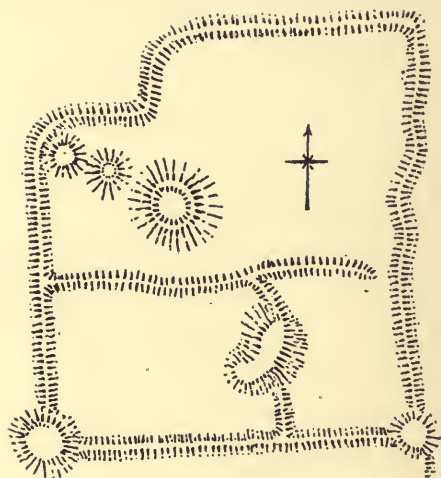
belong rather to the class of "simple enclosures,"¹ for while they may possibly have served as pens for cattle they can never have been of any importance as military works. Mr. H. S. Thoms has very lately described² two earthworks near Falmer, Sussex, which he thinks to be analogous in purpose, and perhaps of the Bronze Age. His name of "valley-entrenchments" sufficiently suggests their disposition. Each lies within a combe of the chalk Downs, and consists of a single earthen vallum with an outer fosse enclosing an area which may by courtesy only be described as approaching to rectangular. The area of one is some 1,500 feet long with an average width of 700 feet; that of the other (Fig. 38), less irregular in shape, is about 500 feet by 400 feet at its widest; and each has an entrance facing down the valley. He can give no other examples of similar works in Sussex, but cites several in the vicinity of the river Puddle about Puddletrenthide, Dorset; and remarks that such valley-entrenchments "all fall into three types, as enclosing valley heads, valley sides, and the valley proper."³ From their resemblance to the work on Martin Down, he is inclined to think these may be of the same age, admitting, however, that such superficial

¹ Class C of the Committee's Schedule (p. 21).

² See *Antiquary*, November, 1907.

³ Warne (*Ancient Dorset*) describes something very similar under the proposed name of a "Pastoral Camp," near Frome Whitfield, only a little distance from the Puddle River. It encloses a small combe running up into the Downs, the single vallum and fosse following the curve of the valley on either hand. Cultivation appears to have destroyed the line of the enclosure at the mouth of the valley, but the fourth side remains intact, and a small opening in it leads to the Downs above. It measures about 570 feet in length, the width at the lower end being about 450 feet. On the chalk downs of the Isle of Wight, between Shorwell and Calbourne, are abundant traces of prehistoric settlements, some of which occupy exactly similar positions to these enclosures at Falmer. Thus the huts of the large British village by Newbarns Down are arranged along the bottom of three diminutive combes, which immediately converge upon a large pond, at the head of a larger valley. A small combe on Brightstone Down has had its upper end fenced off by a considerable embankment, very suggestive of the work at Loose Bottom.

characteristics as shape, size, &c., are but feeble evidence upon which to base conclusions. As a matter of fact there is no other evidence, and his conjecture remains at present a conjecture only, and it may very possibly be that these works near Falmer, and others elsewhere, are works of relatively modern date. The shepherds of the fells construct for their sheep permanent folds of stone, naturally selecting spots where there is a convenient supply of water, and adequate protection from wind and

FIG. 39.¹

weather. In the chalk counties, where stone of any kind is rare if not unknown, they may well have constructed similar folds of earth, running some sort of fence along the vallum in the primitive way. The position of some of the works described, at the very bottoms of the valleys, certainly raises doubts whether they can be of very great antiquity.²

¹ This and the four figures next following are after Dean Merewether's plans in the *Diary*.

² Could these works be proved to be really of the Bronze Age it would be an interesting hint as to the date at which the bottoms began to be habitable for a pastoral folk, owing to the clearing of the forests and the shrinking of

In *The Diary of a Dean* (Merewether) are figured five of these odd enclosures, which appear to have nothing in common but their small size, the feeble character of their valla, and their more or less rectangular plan. The presence of three tumuli¹ within the first of the series (Fig. 39) would seem to suggest some analogy with the simple circular ringworks enclosing tumuli, which are in effect developments of the disc-barrow,² but the separate quadrangular compartments hardly bear out this resemblance.

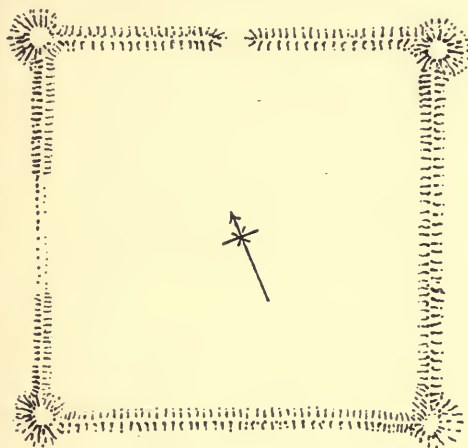


FIG. 40.

Dean Merewether remarks that the mounds at the four corners of the second work (Fig. 40) have just the appearance of tumuli; but these again have their analogies in many works of Norman and possibly of Danish or Saxon date. The third entrenchment (Fig. 41), which

the water-springs; and this would bear upon the theory that the lowland earthworks are later than those of the hills. The works near Falmer lie between the 300 feet and 400 feet contours.

¹ Two of these were opened and were found to contain merely fragments of pottery, bone, and ashes. The third and largest, with its deep hollow in the centre, the Dean learnt to have been dug out by an old shepherd "for a shelter." Amateurs, please take notice.

² See below, p. 527.

lies in a hollow, is quite without parallel. It seems to have no entrance, and the floor of the oval inner enclosure is sunk below the natural level of the soil in



FIG. 41.

the fashion associated with amphitheatres. The fourth work (Fig. 42) is more or less conformable to the hill upon which it stands. A dyke, about half a mile long, seems

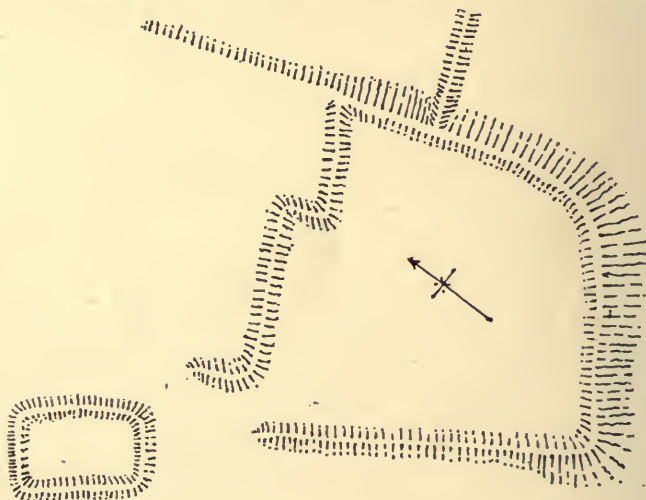


FIG. 42.

to connect it with Silbury Hill, and there is a small annexe outside the entrance at the north-western corner. The last of the series resembles in plan nothing so much as

some sort of dwelling-house (Fig. 43), but what might be called the central room has no entrance-way, and its floor is deeply sunk below the surrounding ground. Excavations in the vallum of this work produced nothing to throw any light upon its age. All five works belong to the northern part of Wiltshire, and chiefly to the valley of the River Kennet.¹

The work known as Soldier's Ring (Fig. 44), near the

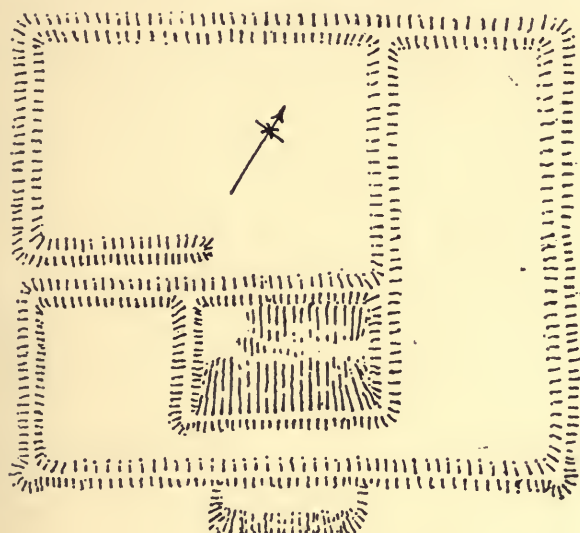


FIG. 43.

Bokerley Dyke in Cranborne Chase, is an extreme instance of exceptional shape, as well as otherwise remarkable. It is pentagonal, the enclosing lines curiously regular in design.

¹ It is quite likely that very many of such small works, whether rectangular or otherwise, represent only the enclosures of domestic homesteads of Saxon or later age. This is especially probable when they occupy low-lying sites. To the present day it is usual, wherever the farmstead occupies a position liable to floods, to enclose it within some sort of embankment—a simple earthen bank, usually of very slight height, and without any sort of ditch or moat. The last which the writer saw surrounded a house and homestead not five years old, by the side of a small stream, which looked as if it could never be in flood. Cause and effect are as closely related in the twentieth century as they were in the beginning of things.

When Colt Hoare described them these lines consisted of three separate valla, without any trace (so it is said) of fosses; and the middle vallum was much slighter than the others, which reached a height of 8 feet. At the present time there are but two valla remaining. The single entrance lay near the apex of the figure. Owing to the apparent absence of any fosses, it is traditional to

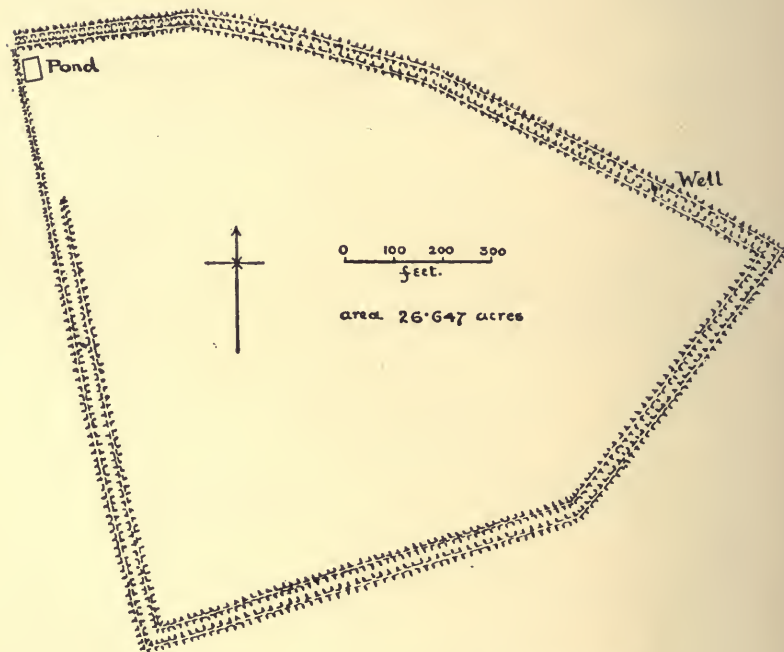


FIG. 44.—SOLDIER'S RING, SOUTH DAMERHAM.

class this work as non-military, but why three valla were considered needful in any but a military work is not clear.¹

¹ There are several other works of very similar plan to be found upon Salisbury Plain, to the south and west of Stonehenge. One of these, five miles due west of Amesbury, contains a number of tumuli, and goes by the name of the Coniger. In one or other of many forms (*e.g.* Conygar, Conigre, Conygaer, Coneygarth) this is a very common appellation of ancient fortified

The great majority of plateau camps properly so called occupy comparatively level and open sites, and are of more or less circular plan. With a few notable exceptions they are, as a class, less strongly fortified, alike by art as by nature, than are the hill-top forts. They may vary in size from less than an acre to almost any dimensions. Stanwick Camp, near Forcett, Durham, reputed the largest enclosure of its own, or of any class, in England, has an area of over 800 acres and a compass of over four miles.¹

Camps of the plateau type, feeble of defence and small of size, were at all periods prior to the Norman conquest the commonest of all, and for every one such fortress as Maiden Castle or Cissbury, Badbury or Dolebury, there were perhaps scores of lesser and more perishable works of the type seen at Wallington and War Ditches. The comparative slowness of their construction naturally hastened their disappearance; but much more fatal to their survival was the fact that in so many cases they lay upon relatively low-lying sites and in localities soon attacked by the plough, while their valla, constructed always of the soil upon which they stood, proved an irresistible attraction to the farmer in quest of good soil, who

sites. Another work very similar to Soldier's Ring is to be found in Mangravel Wood, near Maidstone. It measures 1,160 feet by 800 feet at its longest and widest, and has but one vallum and one ditch, both very feeble. It lies on perfectly level and indefensible ground, and of its present four entrances, that at the apex seems to be the original one.

¹ The measurements (diameter) of a few typical plateau forts are here given as examples :—

Hawridge (Bucks)	. . . .	150 feet
Gallox Hill, Dunster	. . . .	210 "
War Ditches (Cambs)	. . . .	450 "
Wallington (Surrey)	. . . .	500 "
Cholesbury (Bucks)	. . . .	750 "
Maiden Bower (Bedfordshire)	. . . .	750 "
Vandlebury (Cambs)	. . . .	1,000 "
Yarnbury (Wilts)	. . . .	1,500 "

too frequently carted them deliberately away.¹ Such mounds of pure soil were easily removed, whether to fill in the adjoining fosse, to be spread over the fields, or to form a new seed-bed in the tenant's garden. The marvel is not that so many of them have vanished, but rather that so many of them have survived. The forts upon the higher hills have escaped more lightly, if only because the plough came thither later, the soil was less deep and attractive, the mounds themselves were mostly built of sterile chalk or still more unprofitable stone, and also because the great forts were constructed, like Old Sarum, upon a scale to baffle even the ploughman.

The contour fort is an advance upon the promontory fort. It is the work of peoples who no longer allow the stubborn facts of topography entirely to control their methods and their movements. They have learnt to adapt these facts to some degree to their own purposes, although they are still far removed from the masterful independence of the Roman strategist. But promontory forts may have been occupied, and even built, for long ages after the introduction of the newer type. It is, for example, highly probable that the Britons of the Saxon time, retiring into Wales and Cornwall, lapsed again into the savagery which is begotten of distress and reverted to a type of fortification which entailed relatively little labour.

As the contour fort suggests a certain independence of choice in the matter of locality, it suggests also an appreciation of the value of centrality, and centralization implies a decided step towards peaceful and permanent occupation of the soil. In keeping with this suggestion is the fact that such forts frequently show a studied

¹ Near Linkinhorne in North Cornwall is a circular "camp" which owes its preservation, in part at least, to a local belief that whoso tampers with it will die. It is greatly to be regretted that a like reverential superstition does not safeguard such works generally.

elaboration of plan, a deliberate provision, in some of the more highly developed examples, of a fortress for the builders, a fold for their herds, and pasturage for those herds. The amount of labour expended upon the larger fortresses of this class is too vast to be explained save as the deliberate work of a settled community, with whom nomadism is a thing unknown, permanence of abode the normal condition of life. It implies not merely long years of occupation, but large numbers, and great wealth as wealth was then reckoned. There existed indeed other sources of wealth, such as the possession of supplies of marketable material, whether flint or other valuable stone or metal, and the command of the trade-routes of the time—markets and trade are as old as any facts in the history of humanity; but speaking generally property then meant cattle. The cattle of the community would increase proportionally with the community itself, and the larger the community, the greater the space required within the camp for fold-room, without it for pasturage. Camps of very large size are therefore usually far apart, and because of the persistence of fen and forest in the valleys, they were almost invariably built upon the higher ground.

As the conditions of life grew more and more settled, various modifications would follow. The forests would be gradually cleared, and as the forests fell the swamps would shrink. The population would then creep further and further away from the central fortress, further down the slopes and into the valleys. Thus there would grow up new settlements, accidental colonies swarming off from the parent community. Few in numbers and concerned rather with the pursuits of peace than with those of war, these settlers would have neither the means nor the wish to fortify their homesteads on any great scale; nor would they have the need, the parent-fortress sufficing for their protection, or at the worst affording a secure asylum in time of need. These later settlements, albeit perhaps

very very old, would therefore show a simple scheme of defence: they were built rather to safeguard the cattle from wild beasts than the settlers from armed foes. The tremendous labour of rearing double, triple, and even quadruple ramparts of enormous height, the complicated systems of entrance-defence, the vast areas, would no longer be affected, and in their place would be constructed camps of small size, ringed about with a single fosse and vallum of but slight dimensions, but sufficient to prevent the incursions of wolves and the stampeding of the herds. Being built upon lower ground, such camps would show an increasing regularity of plan, no longer determined in any way by the more irregular contours of the higher ground. In the ultimate they would be planted upon the very lowest levels, in positions which owed nothing of their defensibility to slopes or precipices; and experience having taught the builders that the circular plan was an economy of labour, they would in most cases adopt the simplest circular form.

It would seem to be a legitimate inference from such *a priori* reasoning that, subject of course to exceptional circumstances, a camp is later in date according as it is less irregular in plan, less elaborately defended, and constructed upon a less elevated and less defensible site. And so far as the spade has been brought to elucidate the history of ancient earthworks, it does not appear to negative this conclusion.¹

¹ The most competent authorities agree that the great hill-forts of the south-west counties were occupied in the Bronze Age. This, however, does not imply that they were necessarily built after the introduction of bronze. The finds at Ham Hill and Eggardon, *inter alia*, point to the contrary. Apparently the men of the Bronze Age were still content to dwell mostly upon the hill-tops, and as their predecessors of the Stone Age likewise dwelt there (witness Cissbury in particular), it is a reasonable presumption that the later race expropriated the earlier, and took over whatever earthworks the latter had constructed. Such positions as Ham Hill, Hod Hill, Maiden Castle, and Cissbury were in all likelihood strongholds of Neolithic Man before the Bronze Age dawned, but his earthworks, whatever they may

The latest development of all would be reached when, a normal condition of peace having quite superseded the earlier state of war, and the forests having been cleared over large areas, it was no longer necessary within those areas to raise any elaborate defences either for the men or for the beasts of the community, which therefore developed the haphazard and almost defenceless character to be seen in the British villages of Wiltshire and Dorsetshire. This was the phase in which lived the more pacific and progressive natives of Southern Britain, certainly at the time of Caesar's coming, and probably for some considerable time before it. Caesar himself is witness to the density of the population of that part of the island, and to its active prosecution of the peaceful arts of iron-mining and agriculture; and while the mines in question were almost certainly those of the Weald of Sussex, yet the Weald can show scarcely any remains of earthworks of this, or indeed of any age. It is clear therefore that the *infinita multitudo hominum* had abandoned the habit of building earthworks on any great scale, because these were no longer needful. Caesar found the Celtic settlements in Southern Britain mostly easy to destroy, very unlike those of Gaul, which cost him long sieges; and it is certain that the natives raised no new works during the Roman occupation. When the disorganization of the country consequent upon the sudden departure of the Romans was further aggravated by the ever-increasing incursions of the Teutonic invaders, these feeble unwalled villages would be at once abandoned, and though doubtless in a few cases new fortifications would be erected, in most instances the natives would again reoccupy, possibly reconstruct,

have been, were certainly improved upon by the later comers. Possibly some of them were again remodelled by sappers of the Late-Celtic time. The law of continuity seems to have held good in regard to the hill-tops in prehistoric times, as in regard to lowland sites throughout the historic period.

strengthen, or modify, the long-abandoned camps of the older time. Thus may have been produced those earthworks which are supposed to present features partly native, partly Roman, in character.¹

¹ Such have been supposed to be, *e.g.*, the irregularly quadrilateral works at Holmbury Hill, Ockley, and Castle Ilill, Hascombe, both in Surrey, and close to the Sussex border.

CHAPTER VI

SOME PRINCIPLES OF PREHISTORIC FORTIFICATION

"All valiant dust that builds on dust."

ALL fortresses, irrespective of their builders, belong to the passive side of war: they are defensive, not offensive.¹ The more extensive and elaborate the fortress, the more clearly it testifies to a settled condition of things—that condition in which, the era of conquest past, the con-

¹ The Romans employed earthwork as a means of *attack* in the form of the *agger*, or siege-mound, for the reduction of walled towns. This was a broad bank of brushwood, logs, and earth, running direct towards the enemy's wall, and gradually rising until it reached the top of the wall, so as to allow of the advance of a storming party. Such a laborious method was usually necessary only in dealing with very strongly fortified positions protected by walls so sheer as to defy escalade, and by deep fosses. Of such positions Caesar found plenty in Gaul, but there were probably none in that part of Britain which he visited. He tells us, however, that he had to make use of the *agger* in storming an *oppidum* in south-east Britain (*B. G.*, V. 9. 7). In the northern and western parts of the island, where stone was abundant, the troops approached under cover of the *testudo*, and tore down the "rude and unsquared" dry-walling (Tacitus, *Ann.* xii. 35). In Roy's *Military Antiquities* is a plan of some elaborate earthworks known as Birrenswark, in Annandale, which appear to be the remains of the lines of circumvallation drawn (by the Romans?) about the hill for its reduction. They are figured here (Fig. 45) as illustrating a system of aggressive earthwork otherwise very rarely exemplified in Britain. But it must be remembered that the Romans' methods of *agger*, sap, and circumvallation were adopted and used by their successors in the Western Empire until late in the Middle Ages, and nothing that is indubitably Roman appears so far to have been found at Birrenswark.

querors are concerned chiefly to maintain their acquisitions.

As for the offensive side of war, the art of attack, it is impossible to say how far the British peoples had progressed in it before the Romans' time. When Caesar was campaigning in Gaul his difficulties were almost exclusively with enemies on the defensive. Now and again his camps are rushed, his supplies intercepted, a detachment cut off; but the Gauls, Belgic and Celtic alike, have not yet learnt to use their numbers with advantage. They have nothing corresponding to the Roman organization by cohorts, or even by legions. They are still in the tribal state, mustering by tribal levies, knowing little or nothing either of centralization or of decentralization as a reasoned system. With the valiant courage of their breed they combined an incapacity for grasping wide issues, for formulating and maintaining a policy of any breadth and largeness, for tolerating a single reverse, and for subordinating to the good of the nation the interests or the indolence of the individual tribe. They never, even under the most favourable circumstances, put up a good fight against a fortified position. On the other hand, they made a magnificent defence within more than one fortress, maintaining for months an unequal contest against the discipline, the engineering skill, the superior weapons and artillery of the Romans. In one passage Caesar¹ tells us that the Auvergnat Celts had learned "to entrench camps in the Roman manner"; but this need not necessarily mean that the camps thus entrenched were also of the Roman plan. It may mean no more than that the natives, having realized the unwisdom of risking surprise by bivouacking in the open, now constructed some sort of defence, perhaps a mere zareeba. He elsewhere notices the quickness of the Gauls in general

¹ *B.G.* III. 23, 6.

to adopt or to meet the various devices employed by the Romans in building or attacking fortifications,¹ and

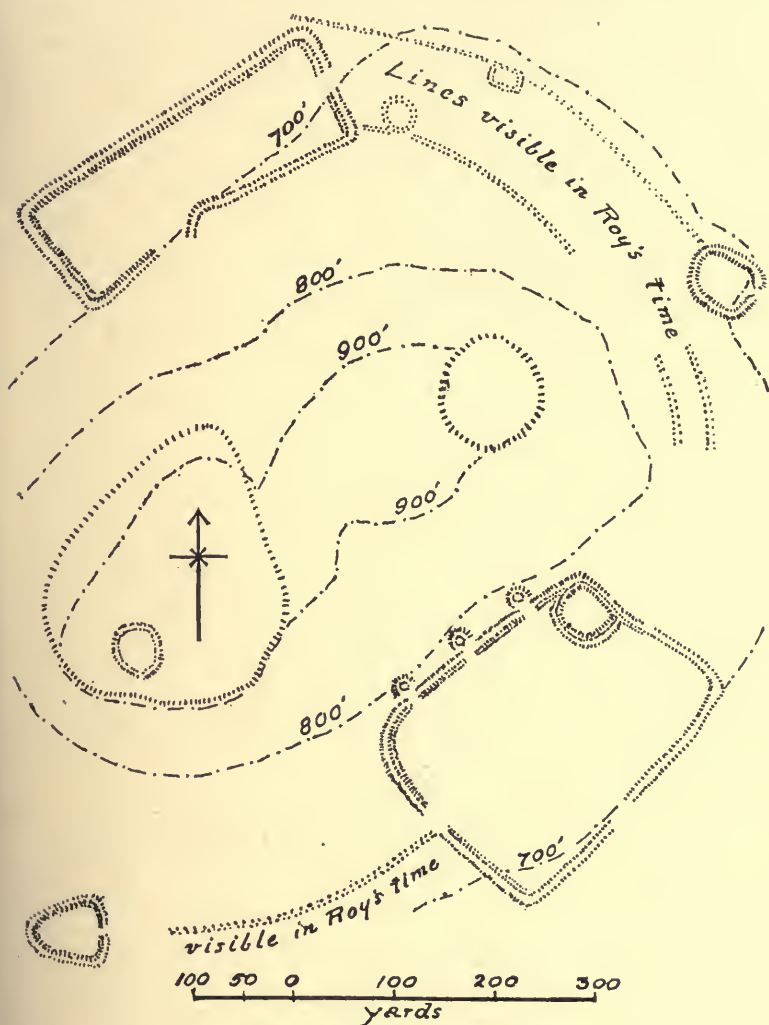


FIG. 45.—BIRRENSWARK, ANNANDALE.

characterizes them as a people of "extreme resourceful-

¹ See especially *B.G.* V. 42, where the Nervii construct regular siege-lines 15 miles in length—a 9-foot vallum and a 15-foot fosse—within 3 hours, and employ siege-towers, *falces*, the *testudo*, etc., in true Roman fashion.

ness." The Teutonic invaders who swarmed across the Rhine proved, however, quite as formidable to the Gauls as did the more scientific Romans. The Gauls never took the offensive with any great measure of success, even when led by a Vercingetorix; even on the defensive they fought always a losing battle, if an honourable one.

There is no reason to think that the most advanced of the British tribes surpassed their Continental brethren in the art of war. They had probably the same qualities and the same failings as had the tribes against whom Cæsar fought in Gaul. They were more skilful in defending fortresses than in reducing them; they lacked discipline, cohesion, and the sense of a national unity. Their attack was expended in one rush: if it succeeded, well and good; if not, it was seldom renewed. Their most formidable arm was the war-car, which they could manœuvre with surprising skill even on steep slopes. But war-cars were useless in attacking entrenched positions, and of artillery they knew nothing¹ They had not the patience, method, and determination requisite for long sieges. If they achieved a success against a fortress it was rather by *élan* and surprise, by simple storm and escalade. It was against such perils that they designed their fortresses, and vallum, fosse, and palisade were the only defences required.

To construct a vallum or fosse upon level ground involves the maximum of labour, since for every foot added to the vallum another foot must be excavated from the fosse. But if the ground show but a little slope the labour is immensely lightened; and the more pronounced the slope the less the toil required to make a

¹ Cæsar, *B. G.* IV. 25, 2. The normal manner of a Gallic or Belgic assault is described in *B. G.* II. 6, 2—a combined attack with slings or other missiles to clear the defenders from the walls; then an approach under cover of the *testudo*, or roof of shields locked together overhead; and finally the breaching of the walls or demolition of the gates.

very formidable entrenchment. The diagram (Fig 46) shows that, while to raise a vallum of one foot in height on level ground requires the digging of a trench one foot in depth, to raise a vallum of twice that height involves the moving of four times as much material, and for a

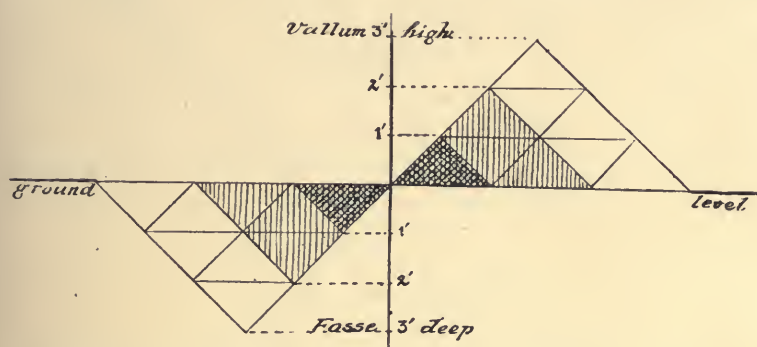


FIG. 46.—DIAGRAM TO ILLUSTRATE LABOUR OF RAISING A VALLUM.

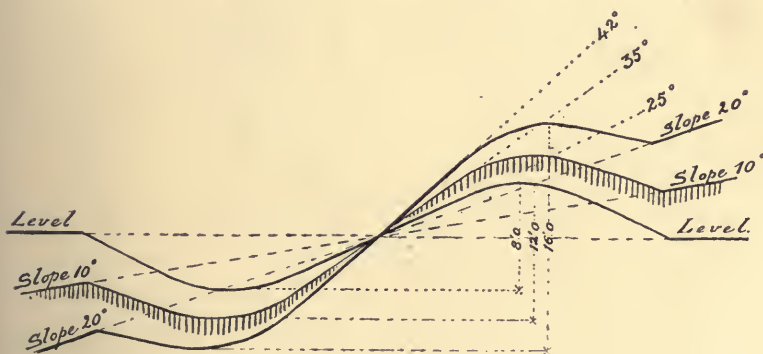


FIG. 47.—DIAGRAM OF VALLA ON SLOPES OF 10° AND 20°.

vallum of 4 feet it is necessary to move no less than sixteen times as much. Thus a rampart of twenty feet in height represents 400 times the labour of making a one-foot vallum—very much more indeed, because of the increased height to which the material must be lifted. These simple figures lend a new dignity to such works as the plateau-forts, the great dykes, and the colossal mound

of Silbury Hill, and show that the seemingly slight labour of making a promontory fort, or the modest ring-wall of such a work as Cholesbury, may have involved vastly

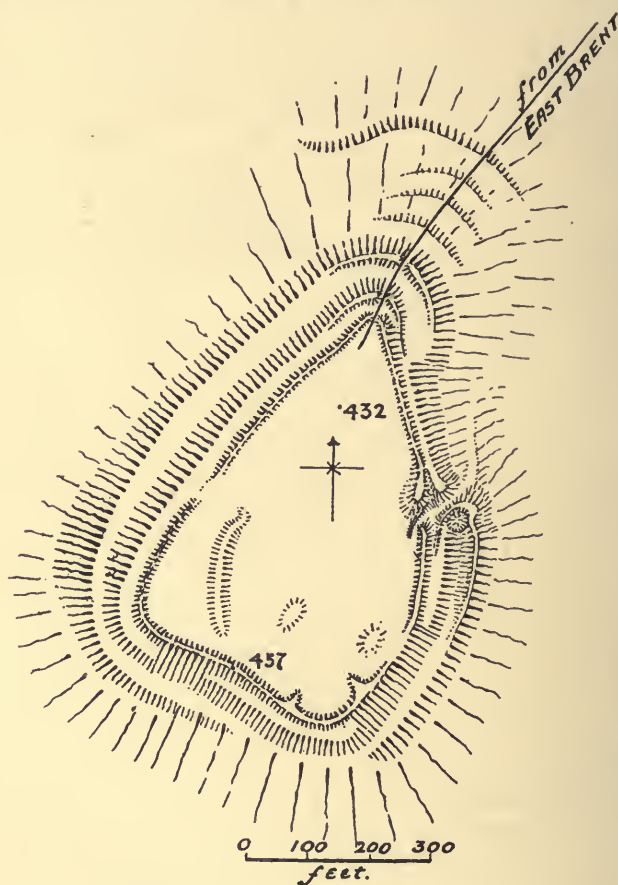


FIG. 48.—BRENT KNOLL, SOMERSET.

more toil than the more showy lines of a Cissbury or even of a Maiden Castle.

Fig. 47 shows how rapidly the labour diminishes as the angle of the slope increases. While there is still a considerable amount of work to be done upon a slope of only 10° , when the slope rises to 20° only the merest

capping of soil needs to be raised to produce formidable entrenchments. Upon slopes of any greater steepness no ditching was necessary at all: it sufficed to throw the soil downward along the line of the enceinte, and there was at once obtained a sufficient vallum. At first sight this method of construction seems to suggest that there was a fosse within the vallum (Fig. 49, C). It is frequently seen in the smaller hill-top forts, in enclosures lying upon the slopes of hills, and in the less expressly military walls of British settlements—*e.g.*, at Bigbury Camp, Harbledown, near Canterbury. Car-

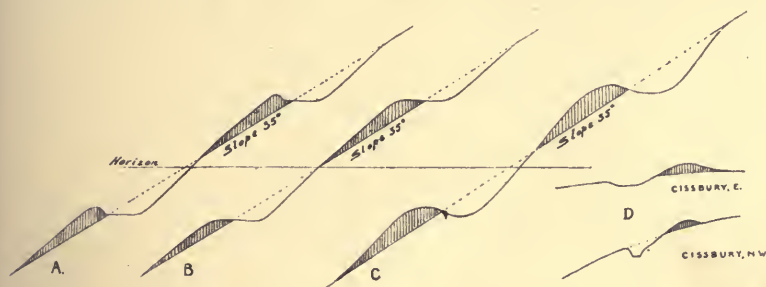


FIG. 49.—TERRACES AND PARAPETS.

ried a little further this method produces a series of scarps and terraces (Fig. 49, B), amply sufficient when crowned with some slight palisading. The western face of Brent Knoll, Somersetshire (Fig. 48), furnishes a good example of this kind of work on the grandest scale. It is a feature of the immense defences of Hambledon Hill, Dorset, and of Scratchbury and Battlesbury Camps near Warminster; and it may be seen on a humbler scale at West Wycombe and Pulpit Hill, and along the western side of the camp in Bulstrode Park, Gerrard's Cross, Bucks. If only the smallest parapet was added at the edge of the terrace, the results were yet more formidable (Fig. 49, A). Dr. Christison cites instances of Scottish hill-forts which were apparently defended in this fashion only, *viz.*, Ringknowes

(Fig. 50) and The Rings, both in Peeblesshire,¹ and Eildon Hill.

Perhaps the most frequent defensive scheme is that in which the excavation of a single fosse has been made to

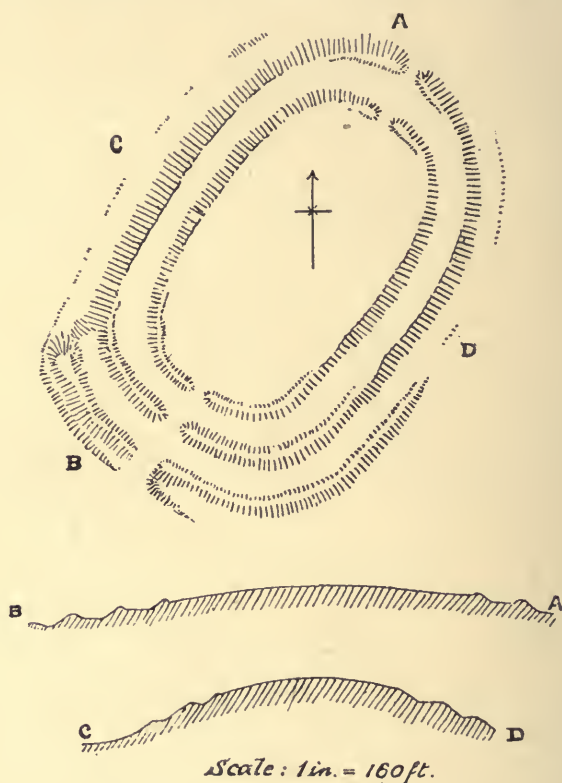


FIG. 50.—RINGKNOWES, PEEBLESSHIRE.

furnish both vallum and parapet. The latter is usually small, but there are many cases where the parapet is as

¹ *Early Fortifications of Scotland*. In an article on the antiquities of Furness (*Archaeologia*, vol. liii.) are described certain small terraces “flanking the western side of a small gorge leading to the south-west entrance of the settlement” on Heathwaite Fell. These, it is suggested, may have been intended to afford posts for slingers defending the approach. They are very small, the largest 12 by 8 feet only, and many much less, and intervals appear to have been left between one and another “to allow of the play of

large as the vallum, and in rarer instances it is the more important of the two—*e.g.*, West Wycombe (Fig. 51).

Where the valla are multiplied there is no rule to determine which shall be the strongest. Most commonly it is the inmost line, but in other cases one of the intermediate lines will be higher than the rest, and in yet other instances the outermost line will be the most formidable.

The camp-builders, and especially those who built the hill-forts, were quick to appreciate any and every advantage of position, and so drew the lines of their entrenchments as to avail themselves to the fullest possible extent



FIG. 51.—WEST WYCOMBE, SECTION.

of the varying slopes of the hills.¹ The section (Fig. 49, D) shows how little labour was really involved in the making of the formidable ceinture of Cissbury. Needless to say the defences are uniformly stronger upon the more assailable side of the position, as at Pulpit Hill. In those

arm." Some of them appear to have been built up with facings of dry stone, and they are characterized by "a peculiar vegetation of small fine heather." Exiguous as they are, it is questionable whether they are not rather lynchets produced by cultivation, such as those described above, p. 38.

¹ That a people otherwise still in a very primitive state of culture might nevertheless be proficient in the science of fortification is shown by the case of the Maoris of New Zealand. The skill and resource shown in the fortification of their *pahi* have excited the admiration of all who are capable of appreciating such things; yet these were the work of a people ignorant of all metals, ignorant of the art of making pottery, unacquainted with the spindle-whorl and the fire-drill, and using in war no more advanced weapons than the most primitive of spears and their favourite club of stone or wood. They were, in fact, in the Palæolithic stage of culture. See J. Macmillan Brown, *Maori and Polynesian*,

cases in which this rule seems to have been violated—*e.g.*, in Desborough Castle (Fig. 149) and the neighbouring fortress of Keep Hill, both near High Wycombe—the explanation is that the comparatively level character of the ground on the more exposed side has enabled the plough to demolish the works, whereas the steeper slope of the more weakly defended side was less liable to such interference. The stronger defences have been ploughed out, while the weaker have either escaped altogether, as at Keep Hill, or have at least suffered less, as at Desborough Castle.

The making of a fosse usually entails the raising of a vallum, and *vice versa*: what is dug from the fosse must be dumped somewhere, and what is piled up in the vallum must be dug from the ground.¹ Instances occur in which the one or the other has so completely disappeared as to be no longer traceable on the surface. Nature, when left to herself, usually obliterates the fosse more quickly than the vallum; but while the latter, once lost, leaves no trace whatever, the line of a fosse is almost always recoverable by excavation. Those hill-forts which are built upon rocky soils commonly show large valla and small ditches; there was plenty of loose stone for building the one, whereas to quarry the other was a difficult task. Thus in many such localities there is no ditch at all. Grim's Pound is one amongst very many Devonshire examples, and in Scotland, about St. Abb's Head, Dr.

¹ The rule is not invariable. The Roman work at Birrens, for example, has as many as six fosses on one front, and only two valla; and a similar fact is to be seen at many other Roman sites. At Worlebury, again, the materials removed from several fosses have been employed to erect a single vallum. Conversely there are a number of cases of camps, disc-barrows, and other anomalous works, in which no trace of any ditch is visible, although the valla may be considerable. Such cases are very deceptive, and in all likelihood the ditch has disappeared under weathering or cultivation. Where the vallum is of stone it is another matter; but where it is not of stone, its materials have usually been dug from somewhere close at hand,

Christison has noticed a group of ten forts all alike in showing no ditches whatever.

The normal position of the fosse is at the outer foot of the vallum,¹ its purpose being less to serve as a shelter-pit than to break the rush of an attacking force. There is, however, very commonly a breastwork or parapet upon its outer edge: as this was presumably originally stockaded, it was analogous to the blind hurdle-jumps of a steeplechasing course.² If, as was sometimes the case, the defenders took the trouble to line the fosse with such sharpened stakes as Cæsar's men occasionally used, jestingly calling them "lilies," or, more grimly, "grave-stones,"³ the result was very sufficient for their purpose. At Penny-Gaer, Llanbedr-y-Cenin, portions of the ground between the vallâ were defended by pointed slivers of limestone, some 3 to 4 feet in length, set firmly endwise in the soil at very close intervals. Within an area of 35 square feet there were no less than 40 of these *cippi*, the majority fallen, but several still erect. Dr. Christison cites parallel instances at West Cademuir and Dreva, both in Peeblesshire. There seems to be at present no evidence that such methods were followed in the camps of the chalk hills, where there was no stone suitable for the purpose.

¹ Earthworks in which the positions are reversed, the fosse being *within* the vallum, are usually held to be non-military works, possibly of religious or occasionally of sepulchral character. See below, p. 559, *sq.*

² The presence of this breastwork on the outer edge of the fosse is a difficulty to modern military engineers, whose aim is always to secure absolute command by gun-fire of every inch of ground within range. Nevertheless it is a constant feature of prehistoric camps, and is found also in many of the great dykes, where it is sometimes developed to such a height as to render it difficult to say which was vallum and which was parapet. It must, therefore, be accepted as the purposed work of the prehistoric strategists, and designed to meet certain conditions of prehistoric warfare which we do not properly understand. It is conceivable that in the case of camps the parapet was added to provide greater shelter to the fosse, in which, as excavation has shown, much of the cooking of the camps' occupants was carried on.

³ Cæsar, *B.G.* VII. 73. The words used are *cippi* and *lilia*.

There was wood, however, in plenty, at no great distance, but it would quickly perish. In many cases this plan cannot have been practised at all, at least under normal conditions, for the ditches were largely used to shelter the population, or, at any rate, their cooking apparatus. The floors of the Roman trenches at Ardoch were covered with cobble-stones; for what purpose is not clear. In the case of yet other hill-forts it has been suggested that loose

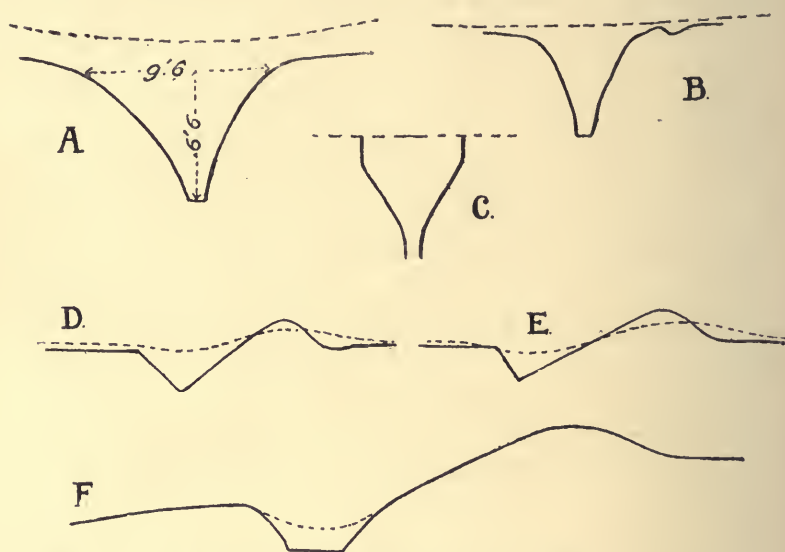


FIG. 52.—SECTIONS OF VARIOUS DITCHES.

stone was purposely littered over the approaches to obstruct a rush, and Dr. Christison cites Doon Castle, Ayrshire, as an apparent instance of the same practice in mediæval times.

The ditches vary greatly in section (Fig. 52). At Cissbury they had flat floors, and the slopes of scarp and counterscarp were comparatively gentle. In other cases, while the floor was still flat, the slopes were almost perpendicular in many places, as at South Lodge Camp, Martin Down Camp, Winkelbury, and War Ditches. Yet all these

fosses were alike dug in the chalk. In other cases the sides sloped uniformly down to meet at an acute angle, as in Ambresbury Banks, Wallington Camp, and Woodcuts Village, all of which are dug in softer soils. The same formation appears, however, in Cæsar's Camp, Folkestone, which is upon the chalk, but is a Norman work. The Romans used both forms of fosse. Owing to wastage, and the rapid accumulation of vegetable mould in the trenches, little can be guessed of their original form without excavation; and those which to-day present the least appearance of depth were often in proportion to their width the deepest. Only when excavated in hard rock have they had much chance to retain something of the original section. Elsewhere they have altered according as their slope was steeper, their depth greater, and the soil more liable to slip and crumble.

If more than one line of defences was constructed, the several lines were most commonly set as closely parallel as the lie of the ground would permit, this arrangement being an economy of labour. Cases occur, however, where an interspace, or berm, of greater or less width, has been left between the lines (Fig. 53). Instances have been cited at Badbury Rings and Pulpit Hill, and in the West-country camps at Shoulbury Castle, Cranbrook Castle, Selworthy, and Old Burrow. It is reasonable to suppose that this arrangement, obviously intended to put a greater interspace between the defenders and any attacking force, is connected with some improvement in the use and range of missiles,¹ in which case it must be a later

¹ There have been found on many sites, sometimes in large numbers, sling-bolts made of burnt clay. These were unquestionably intended to be used red hot, for the purpose of setting fire to the huts, buildings, or stockades of the camp, and possibly of stampeding the cattle. They were used effectively by the Nervii in the siege of the camp of Q. Cicero (Cæsar, *B. G. V.* 35), and they have been found littered over the floor of the timber-built encampment at Ardoch. They have been found also at Mt. Caburn, and in the Lake-Village by Glastonbury, in each case associated with remains

innovation. The provision of inner platforms or terraces, such as are seen at Maiden Castle and Hembury Fort, is perhaps to be explained as a necessary result of the colossal size and great steepness of the works in such cases, for the defenders would be as little able as the assailants to move with rapidity up and down their slopes, and equally needed a firm foothold. The reason, in fact,

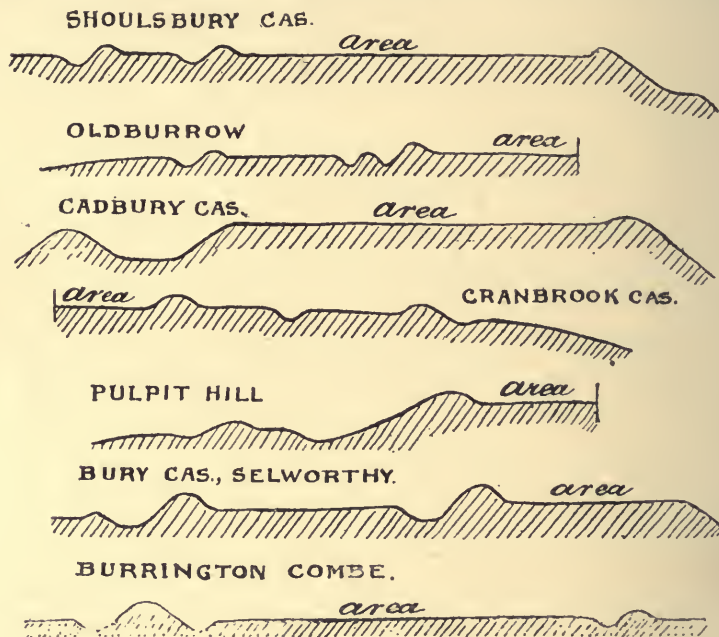


FIG. 53.—SECTIONS OF BERMS, ETC.

was the same which led later builders of stone castles to furnish their walls with parapets and passage-ways.

of pre-Roman date. This suggests a sufficient reason for the provision of multiple entrenchments, and of wide berms between the inner and outer lines of the fortress; for the huts of the Britons seem to have been mostly roofed with highly inflammable materials. Caesar mentions that he burned them, and Tacitus says the Caledonians fired their own dwellings after the defeat at Mons Graupius. Even if there were no great number of such huts within the camp, the firing of the stockade might easily render the place untenable, or cause a stampede of the herds, if any, there sheltered, which were the chief booty to be aimed at.

Geological characteristics naturally influenced the camp-builders. Soil properly so-called is readily worked, but quickly weathered, and does not readily maintain a steep angle. Sand is worse. Hard rock, on the other hand, was ill dealt with by peoples who possessed tools of metal, and much more so by those who were still in the Stone Age; and in point of fact there is reason to doubt whether the hill-forts of our harder hills are of any very great antiquity. The vast majority of them would appear to belong to no earlier date than the Age of Iron, and many of them are certainly post-Roman, if not actually mediæval. Excavated fosses of any great size are therefore the exception upon rocky sites, save where, as at Worlebury, the rock is easily worked. Such sites, however, commonly supply abundance of loose stone which can be used, as it is on the moors and fells at the present day, for building "dry dykes," and the strength of camps in such localities lies commonly in their valla rather than in their fosses, the walls being piled up to any height and thickness, as at Dolebury, at Penmaenmawr, and at Tre'r Ceiri (where the wall is in places 15 feet high and 16 feet in thickness, without any fosse at all). Some considerable skill is required to build a dry dyke which will not readily collapse, as anyone knows who has tried to scale those of the northern moors and unintentionally sent them ruining down for yards together. In most cases time has played such havoc with the stone-built forts as to leave little or no external trace of the builders' methods, but it may be recovered by careful examination. The rudest method was simply to pile up the stone without coursing, but such a vallum, whether subsequently covered with earth or not,¹ offered too gentle a slope to

¹ At Cranbrook Castle, Devonshire (Fig. 25), the work is to be seen in both stages. On the south side the vallum consists of a stone core covered over with earth; but on the north side, where apparently it was never finished, the stone core lies as it was left, with no covering of earth.

be any great protection. A better result was gained by planting retaining-stones along one or both sides of the proposed line of wall, and filling in the interspace with smaller stone, at first promiscuously heaped up, but in later examples more or less carefully coursed. There is a good illustration of this method in Cow (or Cae) Castle, a very small contour-fort crowning a solitary conical lump of rock overhanging the Barle, two miles south-east of Simonsbath, in one of the loneliest parts of Exmoor. The defences consist of a single vallum, and where the turf has not entirely overgrown it, it is possible to see the retaining-stones, some of them of great size, which ring the outer face of the wall and serve as jambs

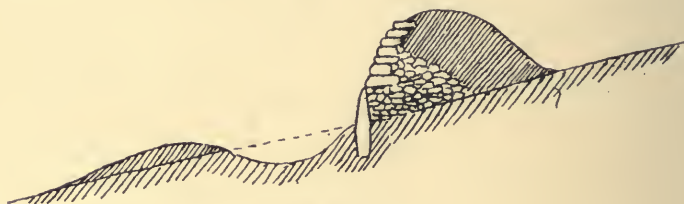


FIG. 54, A.

to the solitary entrance on the east. The plan is identically the same as that to be seen in many of the barrows of this and other districts, and is only one of many analogies between the resting-places of the dead and the homes of the living. At Cow Castle, where the fall of the ground is very rapid, there seem to have been no retaining-stones on the inner side of the wall, but in other instances, and in the Devonshire "pounds," they are planted on both sides, and the whole ring-wall is merely an exaggerated replica of the method followed in building the rudest stone huts. In yet other examples there is a footing of rudely coursed stone of greater or less depth, upon which is piled up the rest of the material with no attempt at coursing; or again, the whole front of the wall is more or less carefully coursed,

with a considerable inward batter, backed with the usual *agger* of earth and stone. Often the vallum was built up exactly as are the broad field-banks still so characteristic of Devon and Cornwall, the earth and

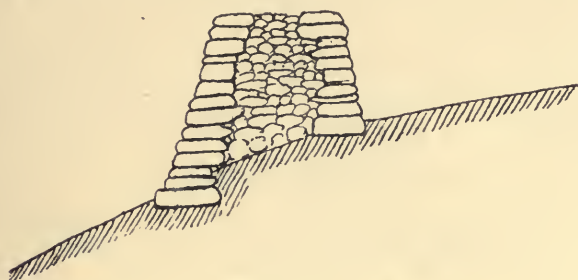


FIG. 54, B.

stone partly retained by facings of larger stone on either side (Fig. 54, B), partly bonded by the use of flat slabs at intervals, just as the Romans bonded their rubble with

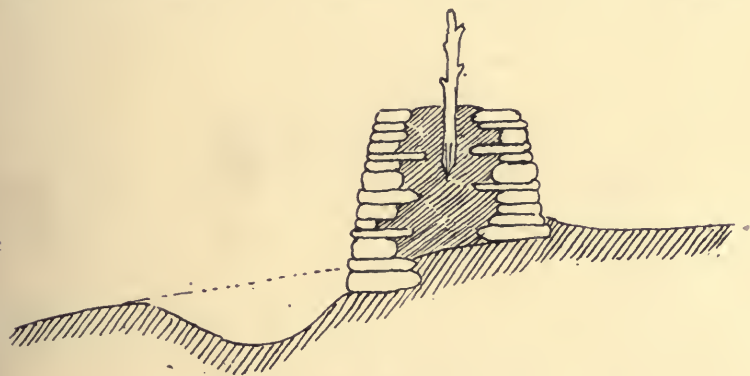


FIG. 54, C.

tiles (Fig. 54, C).¹ The double wall of Grim's Pound may have been intended to have been finished with a filling of earth and stone (Fig. 54, D). Professor Lloyd Morgan

¹ It may be that the practice of planting the tops of such walls with trees (usually beech) is itself inherited from the palisade which probably completed the vallum of the prehistoric camp.

has remarked that the precise methods followed, even in simple dry-walling, are curiously individual, almost always showing some special difference. In the case of Worlebury, in Somerset, the walls of which are in places

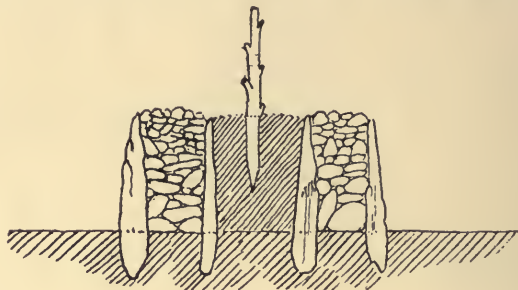


FIG. 54, D.

as much as 38 feet in thickness, there is in reality a series of dry dykes constructed one against another (Fig. 54, E): the number varies from three to six; and the successive dykes being of different heights, the whole



FIG. 54, E.

wall showed terraces at back and front of the highest (central) dyke. It does not appear that there has as yet been noticed in England any example of the peculiar half-timbered walling which gave Caesar so much trouble in Gaul,¹ although this, or something very like it, seems

¹ "All Gallic walls are commonly of this fashion: straight beams are laid upon the ground at equal intervals of 2 feet, their inner ends braced together, while along the outer front the interspaces are packed with large

to have been the method followed in at least two Scottish forts, viz., Castle Law, Forgandenny, Perthshire, and Burghead, Moray;¹ nor is the accurately fitted, but mortarless, Cyclopean masonry of the Mediterranean countries reproduced either in Gaul or in Britain. The use of squared stone and of cement or mortar² in any form, is universally held to be a mark of Roman or post-Roman work, and the construction of the vallum of alternating layers of earth and brushwood, as at Birrens and Ardoch, is also a Roman method, though perhaps not exclusively so.

Stone-built camps rarely show such elaboration of plan or such spacious dimensions as other camps. The wall is

blocks of stone, and the whole is covered with earth. Upon these is laid a second similar row of beams, so that while the same interval is maintained, the beams (of the two rows) are not contiguous. . . . In this way the whole wall is built up course by course until the full height is maintained." (Caesar, *B. G.* VII. 23.) He adds that the beams in question measured 40 feet in length, and that neither ram nor fire could make any impression upon walls thus built. There is a representation of such a wall amongst the Dacian scenes on the column of Trajan, and one or two examples survive in France, notably at Murcens, in Lot, which owes its better preservation to the large size of the blocks of stone available. As a rule the stones used were small, and this, it has been thought, explains the ruined character of many stone-built fortresses; as the timber decayed the small stone filling naturally collapsed into shapeless heaps.

¹ *Early Fortifications of Scotland*, p. 155.

² The use of mortar is usually supposed to have come in with the Romans, and to have gone out with them, until revived in Saxon times under Frankish influence. But if the native Briton learnt anything at all from his four centuries of contact with Rome, he might be supposed to have learnt something of the art of masonry, especially as it was probably the Briton who had to do the work of bricklayer's labourer for the Roman builder. In Bat's Castle, Dunster, mortar has been used in the lowest foundations of what appear to have been small *tourelles* flanking the western entrance, but to what date it belongs is not evident. The stone is totally undressed. Such facts as the finding of some hundred bushels of lime in a single pit in a Romano-British village near Abingdon make one question whether the natives may not have done more in this direction than is usually supposed, though that may, of course, have been intended for another purpose. There is no masonry at all in the Romano-British villages so far explored.

commonly single, sometimes double, but rarely are there more than two. The camp on Whit Tor, Dartmoor, about $1\frac{1}{2}$ acres in area, is surrounded by two walls, the

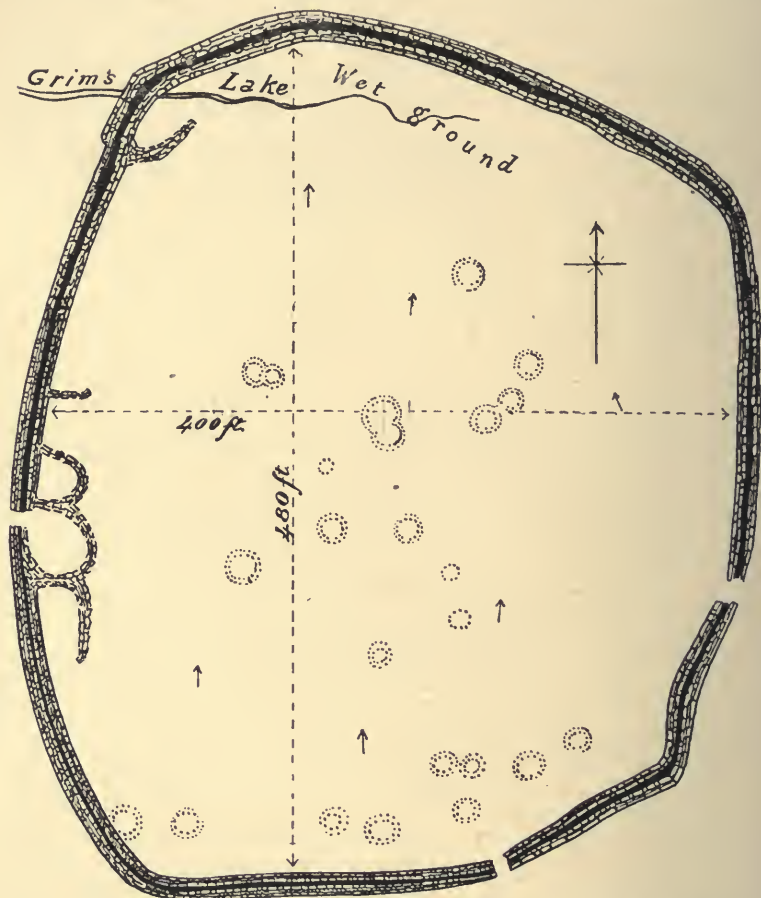


FIG. 55.—GRIM'S POUND, DARTMOOR.

outer only some 4 feet in height, the inner from 6 to 7 feet. Each was originally 10 feet or more in thickness, and the interspace averaged about as much. The same plan is found at Brent Tor, and reappears in some of the "pounds" on the moor, *e.g.*, Grim's Pound (Fig. 55).

Whit Tor camp is remarkable for the manner in which the natural upstanding rocks of the site have been embodied with, and built into, the walls of the enceinte.

The great fortress of Worlebury, on the hill overlooking Weston-super-Mare, is the only English work of its class and dignity which has been thoroughly explored.¹ Its area (Fig. 56), measuring about 1,500 feet in length by 350 feet at its widest part, embraces $10\frac{1}{4}$ acres, and is divided into two unequal parts by a fosse, partly natural, partly artificial, and without vallum. The smaller (eastern) division was the principal stronghold, defended on three sides by an enormous dry-built wall of the peculiar construction seen also at Tre'r Ceiri (Fig. 54, E). Its original width was no less than 38 feet, and in places it still rises 8 feet above the area and 16 feet above the base without. It was apparently never provided with a stockade. Its débris, spreading on either hand, has covered the slopes with broad screes of stone which make it difficult to determine accurately the character and form of the further defences, and these have been greatly damaged also by enclosures, especially along the southern side of the hill. Along the northern side the steep fall of the limestone rock rendered needless any artificial works, but the eastern end, being more assailable, was covered by a second and smaller dry-built wall, separated from the inner wall by a broad fosse hewn in the solid rock. The material for the walls was obtained largely from this fosse, and from four additional ditches which cover the approach from the east. Beyond all these lay two valla, running across the ridge of the hill from north to south, but apparently intended less for defence than as cattle-fences. There were three gates, that in the south side being the chief. Its width was 13 feet, and it was

¹ See the monograph *Worlebury*, by C. W. Dymond (second edition, enlarged, 1902). The name of Worlebury attaches to another camp, circular, about 350 yards across, at Stockbridge, Hampshire.

probably originally covered by ditches like those to the east. The area is pitted with depressions marking the sites of ancient dwellings. Upwards of 100 have been explored, and the results are a striking example of the value of careful examination. The camp has been shown to be the residence of a people of the Prehistoric Iron (Late-Celtic) Age, and to have been dismantled about the date of the advent of the Romans in Claudius' time.¹ It was evidently taken by storm and its occupants put to the sword, for the skulls recovered show unmistakable signs of the most violent deaths. The skulls are of the long-headed (Iberian) type, and suggest that at the date in question the dominant race in south-western Britain were the descendants of those Iberians who had preceded the round-headed Brythonic race, and who had been ousted by them from the more easterly parts of the island. It will be observed that the difference in race in nowise implies a difference of culture: the *reliquiæ* discovered in the pits of Worlebury denote a culture exactly similar to that of the Late-Celtic and Brythonic camp of Mount Caburn and elsewhere; the pottery, weapons and tools are precisely similar, and the same animals were familiar to both—horse, red-deer, goat, sheep, pig, and ox.²

Mention has been made of the curious "vitrification" alleged to have been observable in the now demolished vallum of Burgh Walls Camp, Clifton. The notion that the builders deliberately set themselves to construct such glass-fortresses seems to have fascinated archæologists, who have concerned themselves to find evidence of the

¹ C. W. Dymond thinks its destruction may have been due to the Romans, possibly under Vespasian, *circa* 47 A.D. Professor Boyd-Dawkins seems to think it was more likely due to Belgic invaders whose operations were interrupted by the advent of the Romans.

² C. W. Dymond insists (*op. cit.*) further upon the unlikelihood of there having prevailed any distinguishable *tribal* styles, except in so far as locality, or the traditions of life in any particular locality, might have influenced its inhabitants of the time.

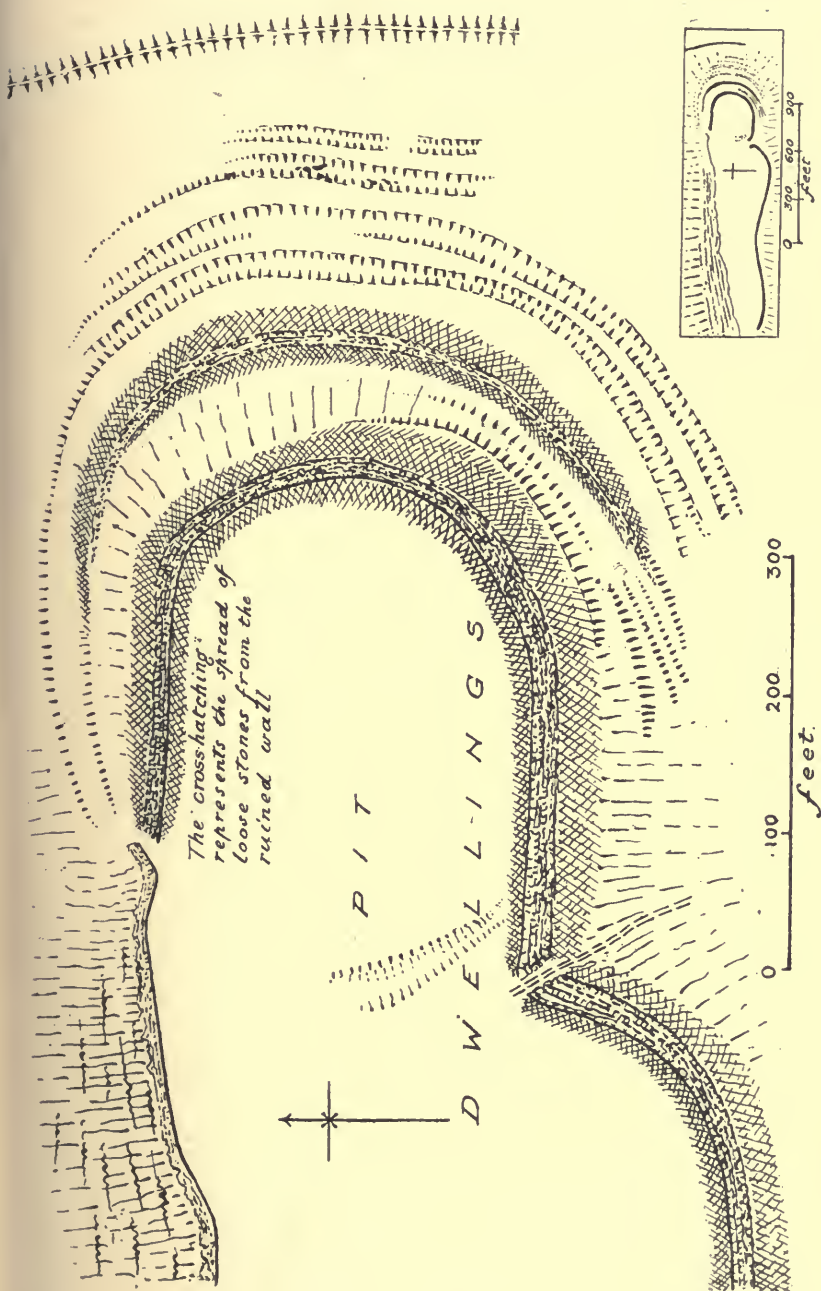


FIG. 56 — WORLEBURY, EAST END.

existence of these in Wales, in Ireland, in Brittany, and particularly in Scotland, where no less than fifty-two examples have been alleged to exist by various writers, the Ordnance Survey in twenty-nine cases endorsing the assertion without demur. Dr. Christison¹ has been at pains to examine the evidence for his own country, and comes to the conclusion that of the alleged fifty-two only twelve show traces of vitrification sufficient to warrant their being recognized as intentional. The solitary Welsh example alleged to exist near Corwen he dismisses at once; of the French examples he has grave doubts; and of the Irish examples he points out that we have no sufficient evidence. Even in the case of the twelve Scotch examples which may deserve to be called proven, it is not easy to see either how or why vitrification was effected. As at Burgh Walls it is generally very partial, and almost always found near the top, where it might have been an accidental consequence of the lighting of beacon fires. On the other hand it appears that those forts which have been thus treated are actually built of stone apparently expressly selected because of its being easily fused, and Dr. Christison makes the tentative suggestion that such vitrification was intended to bind the loose stone into a firm mass capable of bearing the weight of the defenders, as well as to obtain a more perpendicular front to the wall; and he draws attention to the fact, that so far as his observations go, the vitrified walls show no traces of coursing, being mere "rickles" of stone which, unless artificially bonded in some way, must have refused to be built up to any considerable height, and must have always presented a very slight slope to the assailants and a very loose foothold to the defenders. His summary of the evidence is the best that is forthcoming at the present time, and, as he points out, only excavation, and excavation conducted on strictly

¹ *Early Fortifications of Scotland*, ch. iv.

scientific lines, can solve the problems connected with these "palaces of glass."¹

Chalk, although it varies greatly in hardness, proved to be the substance most amenable to the prehistoric builders. This in part explains the elaborate character and wide extent of the camps of Dorset and Wiltshire; just as its peculiar adhesiveness, offering exceptional resistance to the agencies of denudation and wastage, is in part accountable for the almost uniformly good preservation of those works. Nevertheless there are curious differences even upon the chalk areas. The camps of the South Downs are mean and poor when compared with those of Wiltshire and Dorsetshire. Cissbury excepted, they were not planned on any extensive scale, and their trenches have therefore suffered proportionately greater damage under the wear of centuries. Nor are there any camps in Buckinghamshire, Hertfordshire, and Cambridgeshire to rival those of the area about Salisbury Plain. Norfolk has scarcely any vestiges at all of British castrametation, Suffolk very few; but, on the other hand, Cambridgeshire boasts the most tremendous of all the great dykes of Britain, and it is certainly curious that the people who were energetic enough to rear such works as the Devil's Dyke and the Fleam Dyke should apparently have constructed no analogous defences in the shape of camps. The fact suggests that the admitted difference of race between the inhabitants of East Anglia and those of the rest of the island goes back to very early times indeed.

Incredible as it must seem to anyone who tries to realize the labour involved in the building of any great

¹ It has been suggested that the notion of "palaces of glass," which figures so largely in mediæval romances or in fairy tales, may have originated from casual observation of such vitrification in ancient forts. It is hardly necessary to seek for any such material origin of the idea. Where are to be found the gilded or the silvered fortresses from which (we may as well imagine) arose similar tales of palaces of gold and of silver?

camp, it seems none the less to be the fact that many of them were planned and constructed according to one original design. It is very rare to find a camp which bears any obvious signs of enlargement.¹ The dimensions seem to have been determined upon once and for all, and all that later ages could do was to alter, improve, or destroy,

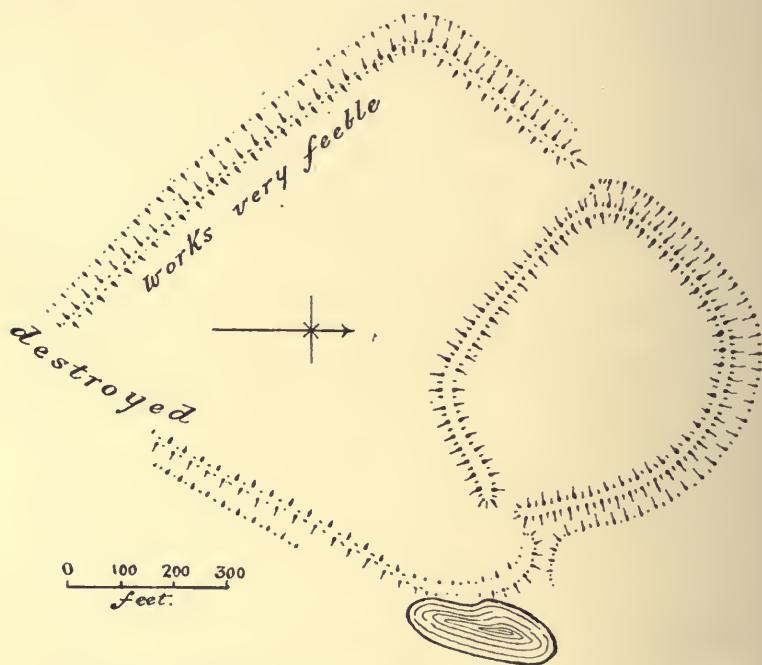


FIG. 57.—EYNSHAM PARK CAMP.

the defences. Even in such a case as that of Eynsham Park Camp, Oxfordshire, where a much larger and feebler enclosure (Fig 57), seems to have been added to a smaller and stronger, it remains to be proved that the works are of different dates. Caynham Camp, on the Titterstone Clee Hills, two miles outside Ludlow, has been thought to be an instance of enlargement. It is (Fig. 58) an irregular oblong

¹ For the particular instance of Maiden Castle, see p. 100.

enclosure, nearly 700 yards long and with an average width of 140 yards, defended by a single vallum and fosse, except on one of the longer sides (S.) where, the approach being easy, a second line of defence was added. Across the area at the western end runs a fine vallum dividing the whole into two parts, respectively 620 by 140 yards, and 140 by 60 yards. It is of course quite possible that this is a genuine instance, the western enclosure having been later annexed to the eastern and larger area, but only the

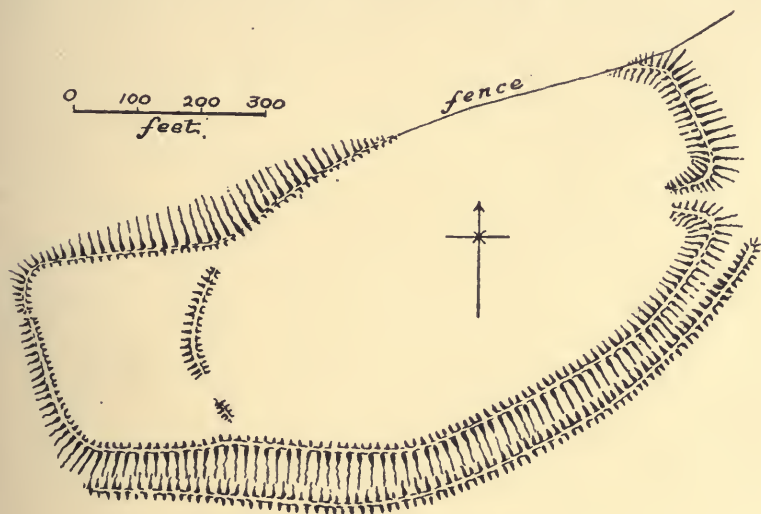


FIG. 58.—CAYNHAM CAMP.

spade can verify the surmise. To argue that the annexe is Roman work simply because it is approximately rectangular and rectilinear, is quite insufficient. It might as well be Norman, and there was a Norman castle somewhere in this neighbourhood.¹

Here and there one finds incomplete works which seem to throw a little light upon the method of construction.

¹ The camp is described in *Arch. Cambrensis*, vol. xvi., 5th series (1899). Other camps showing cross-banks which might be argued to be signs of enlargement are Bindon Hill, near Lulworth, Dorset; Hambledon Hill, Dorset; Hembury Fort, Honiton (Fig. 12).

One such is that on Brendon Hill, West Somerset, known as Elworthy Barrows (1,300 feet). The designers' intention was evidently to construct a circular camp, and the completion of one vallum and one fosse was of course the first step to this; though whether they intended to add other and further works can never be known. The position being almost equally assailable on every side, it might be supposed that the construction of the first enceinte would proceed *pari passu* at every point of its periphery. But that was not so at Elworthy. In parts the vallum and fosse are developed to formidable dimensions, while over long distances elsewhere the ground has apparently never been disturbed at all; and more curious still, so far as the position can be called less defensible at one point than at another, it is at the less assailable sides that the work has been pushed forward with most energy. There seems no question that, for whatever reason, the building of the camp was suddenly interrupted, in spite of the advantages offered by its superb position close beside the old trade-route to the mines of Cornwall, and with an outlook literally over the whole of the county. It is possible that in some other instances the fragmentary character of ancient earthworks may be due less to subsequent destruction than to original interruption.

In many cases, probably in almost all, the vallum was originally surmounted by a stockade of timber, logs, or thorns. The holes in which the large uprights were planted have been uncovered in the chalk rampart of Uffington Castle, Berkshire, while at Bantam Camp, a promontory fort on Bigbury Bay, near Thurleston, have been found remains of similar uprights *in situ*. Heavier logs would be used in camps at low levels where there was wood in plenty close at hand, as Cæsar mentions was done in the British *oppida*. The Romans seem to have employed stockading to complete the defences of their camp at Ardoch, especially about the eastern gate. It

was probably employed also in minor forts like Castle Dykes, Ripon (Fig. 108), in which excavation has failed to find any trace of a mason-built enceinte. We have it on the authority of Cæsar¹ that some of the Belgic tribes, and notably the Nervii, were expert in the making of almost impervious fences, and some such device may well have been employed by the Belgic settlers in this island. Stockades, logs, or thorn-fencing would alike present a very troublesome obstacle to an attacking force struggling up the steep slope of the vallum beneath. Even modern troops cannot always negotiate a zareeba of thorns with success, and thick gorse will turn even the best of hounds.

The number and size of the gates, without counting mere posterns, varies according to the size and the class of camps. The small ring-forts (of the lowlands) commonly have but one entrance, but larger examples, such as Yarnbury and Ambresbury Banks, may have several. Peninsular forts, as a rule, have but one entrance. The generality of contour forts present two, and of these one is usually more spacious than the other. In the more complex camps showing two or more divisions of the area, the inner work commonly has but one entrance, as at Old Burrow and Winkelbury. The gates vary in size : at Pen-y-Gorddyn, Llandulas, one entrance is 9 feet wide, the other 13 feet ; at Smalldown, Chesterblade, the main entrance was 35 feet in width ; at Winkelbury the gates are represented by mere gaps in the valla, one of them 115 feet long.

The ingenuity of the builders was chiefly exercised in making the entrances difficult and dangerous of access. Often the gate was placed at one corner upon the very edge of a precipice or slope, over which an unwelcome

¹ *B. G.* II. 17. 4. The same method of fencing, from whatever source derived, is regularly employed in many English counties to this day, and notably in Lincolnshire. Was it learnt from, or introduced by, the Continental Gauls ?

intruder could easily be driven, the narrowness of the approach not admitting of an attack in force. This plan is to be seen at Hambledon Hill, and at Mt. Caburn (Fig. 223). More usually the gate is found full in the face of the containing wall, but masked and hampered in a variety of ways. The ends of the vallum on either side are commonly raised considerably above the average level,¹ thus affording a better command of the approach (Cissbury, Bat's Castle, Maesbury, Dolebury), and are frequently splayed considerably, so as to furnish standing-room for an extra number of defenders (Cissbury and Maesbury). These splays are in some cases developed into large terraces, with or without breastworks, so arranged as to rake the path and the adjoining fosse from right and left, as at Brent Knoll (Fig. 48) and Pillesdon Pen (Fig. 20). In very many examples the vallum has a pronounced inward curve, on one or both sides of the entrance, so that all incomers must run the gauntlet of a cross-fire at the closest quarters. In Dumpton Great Camp (Fig. 59) near Luppitt, this recurve extends to nearly 100 feet. It is traceable in many of the camps of the chalk, *e.g.* at Mt. Caburn (Fig. 223) and at Eggardon (Fig. 19); other examples are the small ring-work in Dunster Park (Fig. 69), and Caynham Camp (Fig. 58). It is said to occur also in some of the Devonshire pounds.² It is a very much more prominent feature of the dry-built hill fortresses of Wales; at Pen-y-Gorddyn, Llandulas, both gates of the

¹ So regular a feature is this that it may often be taken as a rough test of the age of a gap in the vallum. Where the gap has been made in recent times there is no such raising of the wall. In the curious case of Berry Castle, Huntshaw (Fig. 73), it seems to have been designedly used as a blind. In Ravensburgh Castle, near Luton, the vallum is thus raised on one side only, and that to unusual proportions.

² The fact that the very same plan survives locally in the making of sheep-folds may perhaps suggest that cattle and their requirements had a good deal to do with determining the plan of many of the prehistoric camps, *e.g.*, that at Gallox Hill, Dunster (Fig. 69).

fort display it in great perfection. About the lesser gate, which is 9 feet wide, the walls recurve for 10 yards; about the larger entry their recurve is twice as long, although the gateway is but 13 feet wide. On either side of the passage is a rectangular guard-house built within the mass of the wall, and on the face of the wall right and left may still be seen the grooves in which stood

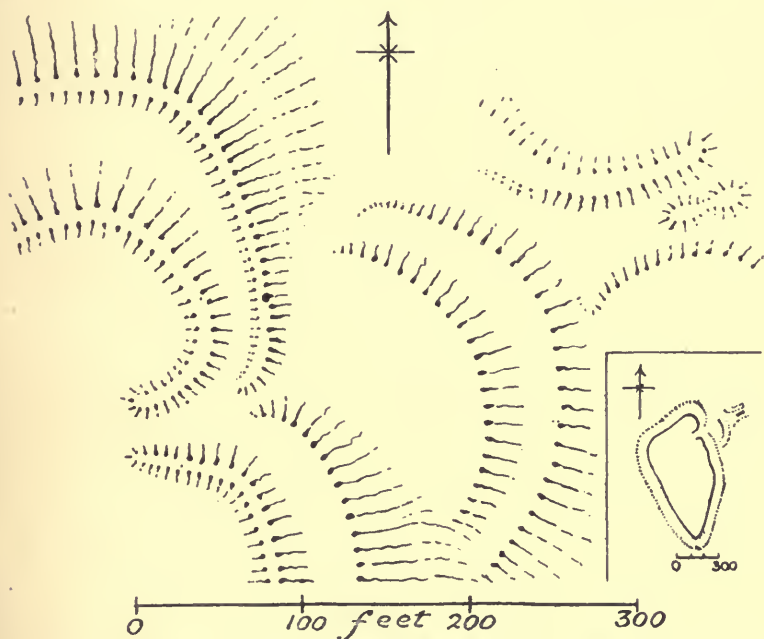


FIG. 59.—EAST GATE, DUMPTON GREAT CAMP.

wooden posts—their sockets are still traceable in the soil below—marking the position of some sort of barricade or gate. Traces of similar posts were found at Mt. Caburn. In Holne Chase Castle, Ashburton (Fig. 60), one end of the vallum, dry-built, is recurved for a distance of 20 yards, while the other is splayed to a sufficient width to allow of building within its mass a circular guard-house¹

¹ Others see in this the remains of a pitfall, or blind entry, like that at Membury Camp (Fig. 72).

22 feet in diameter. The wide splay of the ends of the valla is a common feature in camps of all classes, whether built of chalk or of stone, and was perhaps intended in many cases to provide for such guard-houses, now mostly too much ruined to be recognizable. In many cases the heaps of fallen stone have all the appearance of ruined towers, although the erection of a tower must, to builders

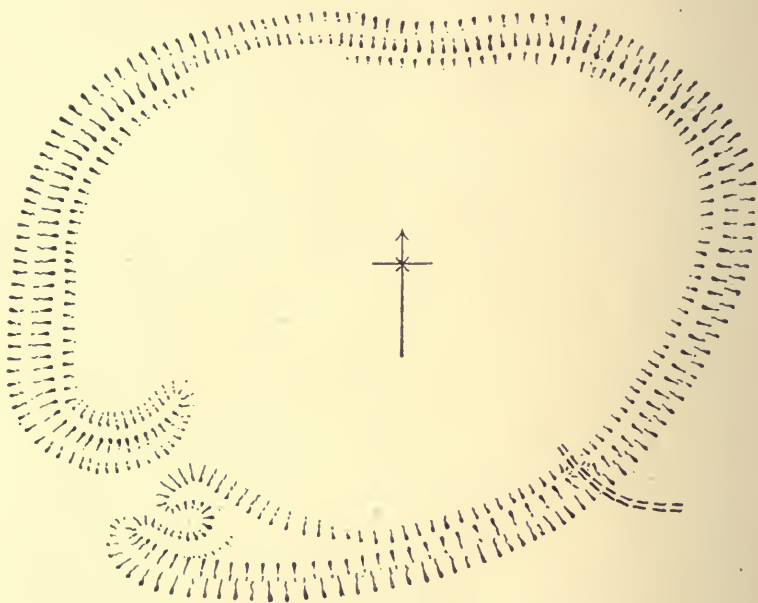


FIG. 60.—HOLNE CHASE CASTLE.

using no mortar, have been, if not an actual impossibility, at any rate as dangerous to the occupants as to the enemy. At the western entry to Bat's Castle, in Dunster Park (Fig. 69), there are distinctly visible the bases of two small *tourelles* flanking the passage; but this work is of very doubtful date, and the builders had used mortar. There are instances in which the guard-house stands outside the entry, *e.g.* to the right hand of the main gate of Brent Knoll Camp (Fig. 48), and to the left of the

south-western entry to the great camp at Burrough-on-the-Hill, Leicestershire (Fig. 61). There seems to have been something of the sort also at the eastern gate of Bat's Castle.

In Grimsbury Castle (Fig. 62), Hampstead Norris, Berks, one vallum is carried forward at a right angle to the camp along the path of approach, flanking it for many yards. In Dudsbury Camp, near Wimborne (Fig. 63), this is represented by a short bank running at right angles to the inmost vallum, like the head-line of the letter T. In Muzbury Camp, near Axminster (Fig. 64), each entrance to the

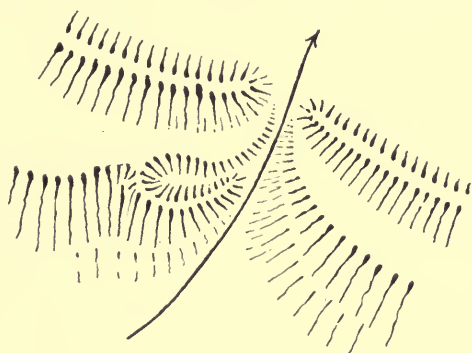


FIG. 61.—GATEWAY, BURROUGH-ON-THE-HILL.

odd bottle-shaped fortress is barred by double traverses extending right across the narrow area. The same end was attained more easily elsewhere by carrying the pathway diagonally through the several lines of earthwork, so that it should be enfiladed throughout by the successive ramparts. Instances are to be seen at Hembury fort (Fig. 12), Eggardon (Fig. 19), and in the small north-west postern at Cissbury (Fig. 214); and it is a prominent feature of many stone-built forts. In the most notable instances the slant of the path is from right to left of the person entering, so that the unshielded right side was exposed to the missiles of the defenders. As the shield was carried on the left arm

the converse slant from left to right would have been less difficult to negotiate. The north-west gateway of Hod Hill Camp (Fig. 65), Dorset, shows a remarkable combination of the diagonal entry with the recurved gateway above described.

Sometimes the successive lines of the defences are

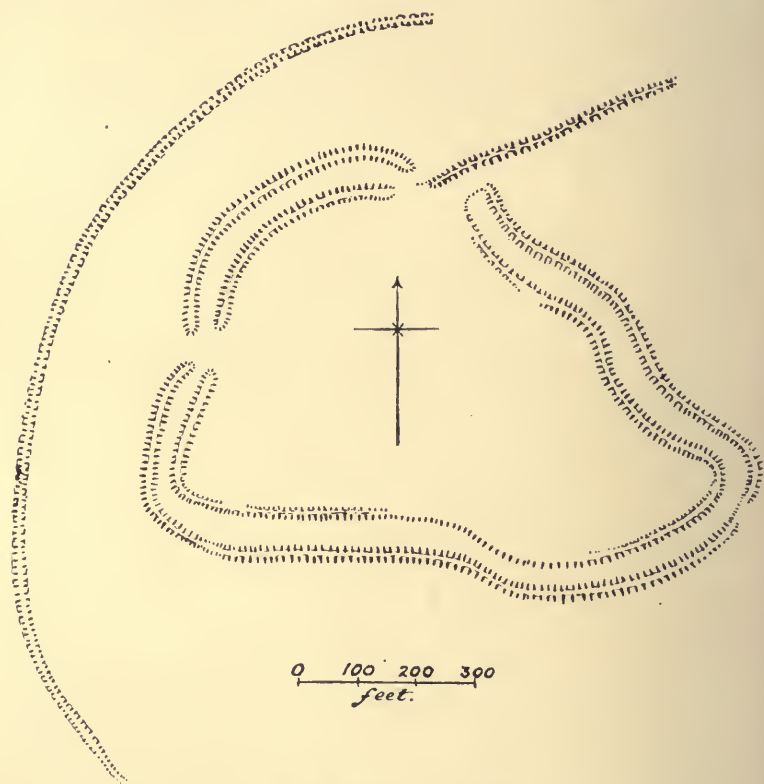


FIG. 62.—GRIMSBURY CASTLE.

arranged *en échelon*, as at Winkelbury (Fig. 11), or they are made to overlap more or less, as at Buckland Brewer (Fig. 66), $3\frac{1}{2}$ miles west of Great Torrington Station, where the overlap is as much as 200 feet in length, and the entry is further barred by a hollowed mound. In some cases the entry becomes a downright zig-zag, as at Maiden

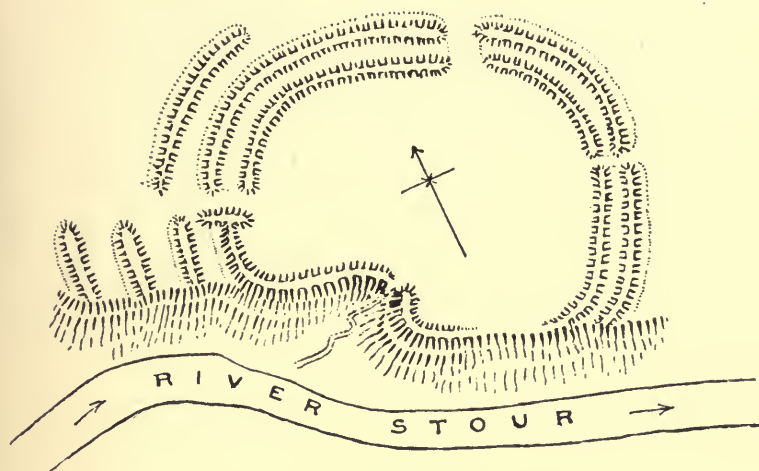


FIG. 63.—DUDSBURY, WIMBORNE.

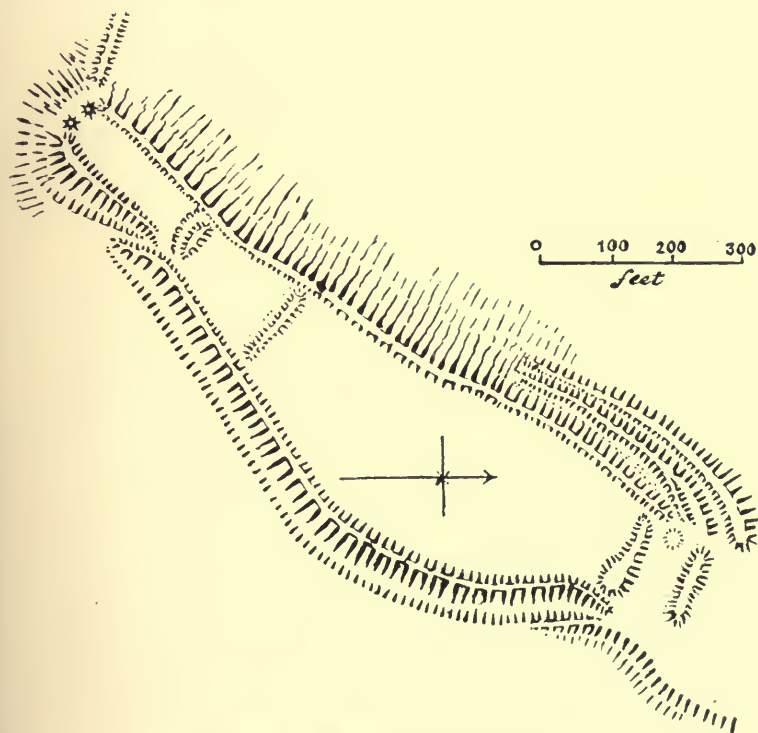


FIG. 64.—MUZBURY, AXMINSTER.

Castle (Fig. 18). In the last-mentioned camp, and in the camps of Badbury Rings (Fig. 21), and Battlesbury (Fig. 68), a peculiar bastion-like outwork of uniform type and large enough to accommodate a numerous force, overlooks the path which winds round and beneath it.¹ Often there are found depressed mounds, isolated or in groups of two and three, either at some little distance in advance of the gate—*e.g.*, at Mt. Caburn (Fig. 223) and Chanetonbury (Fig. 91)—or actually within the entry—*e.g.*, at Cockburn Law, (Fig. 75), Muzbury (Fig. 64), and the western end of

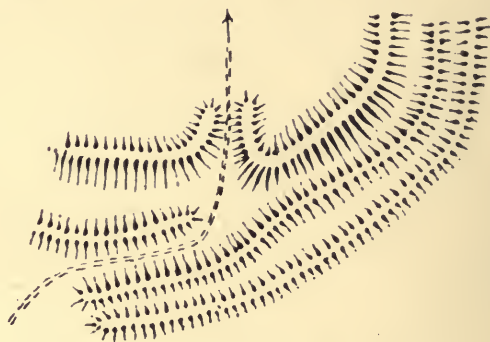


FIG. 65.—NORTH-EAST GATE, HOD HILL.

Maiden Castle (Fig. 18)—or even in the rear of the vallum, as at Badbury (Fig. 21). At the southern corner of Battlesbury Camp, Warminster, a mound² of unusual size stands within the inner fosse, which has been splayed to make room for it (Fig. 67). In yet other examples more extensive works are thrown forward to cover the

¹ It may be only an accident, but a curious accident, that in the three instances mentioned as showing this form of defence to the gate, it is found attached to one gate only, and that always the eastern gate. Something very similar covered the eastern (and only?) entrance to the colossal fort known as White Cathertun, near Brechin. Other examples of this form of defence are Yarnbury (Fig. 30), Bratton Camp, and Chiselbury Ring, all in Wiltshire.

² Marked as a tumulus on O.M., but its peculiar position is against such an explanation of its original construction.

approach, such as the fosse and vallum traversing each approach to Chanctonbury Ring (Fig. 91), the long ditch to the west of Grimsbury Castle (Fig. 62), the vallum

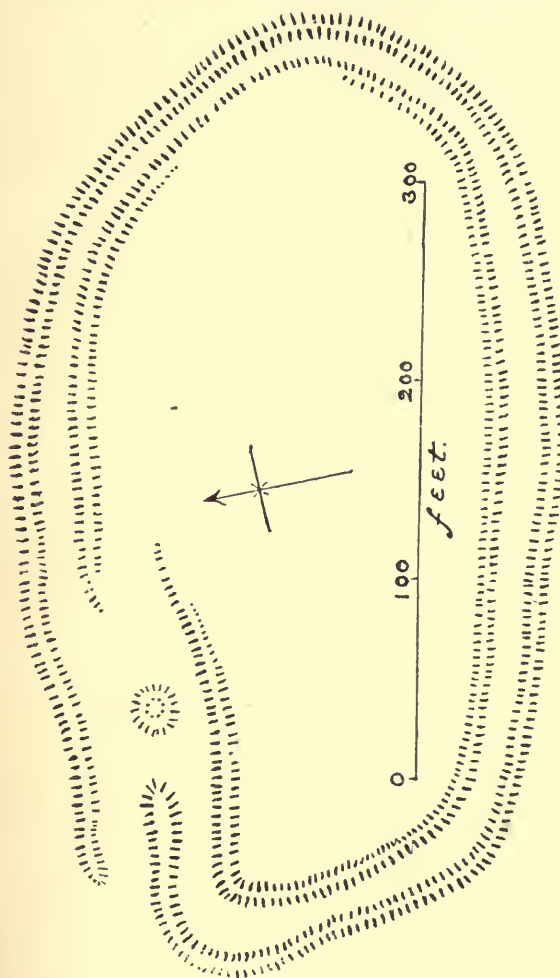


FIG. 66.—BUCKLAND BREWER.

to the south-west of Eggardon, (Fig. 19), and the successive walls and fosses which cover the approach to Worlebury (Fig. 56) from the east. The entry to the circular camp at Norton Fitzwarren, near Taunton, lay along a hollow way of 400—500 feet. This may not be an

intentional feature, but in some of the Northumbrian camps occur real "sunken ways" between unmistakably purposed banks on either hand; and in many hill-forts of Wales and the North the pathway is purposely led up some natural combe in such a way as to expose all assailants to a concentrated plunging fire from the walls. The entrances to Maiden Castle (Fig. 18) and Dolebury (Fig. 224), are superb

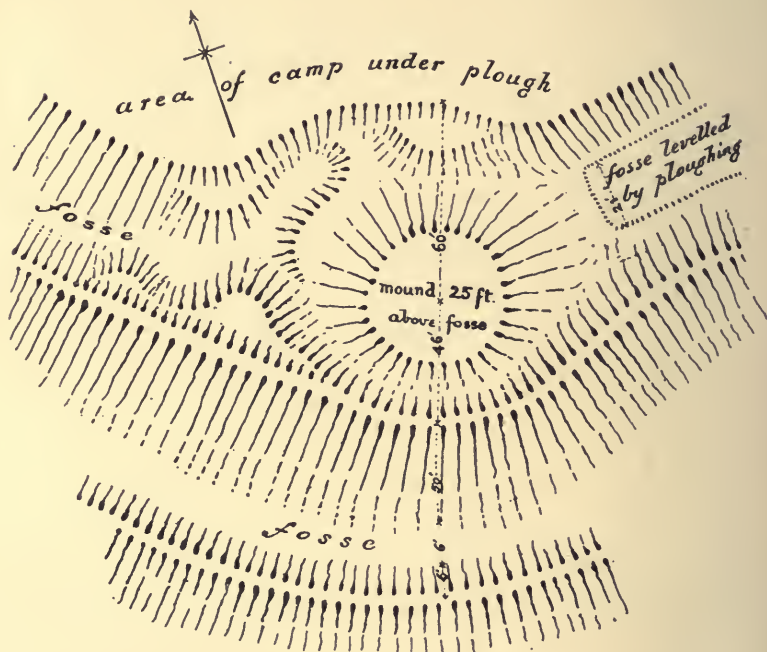


FIG. 67.—SOUTH DITCH AND MOUND, BATTLESBURY.

examples of defensive engineering. No stranger could hope to find his way, if resistance were offered, through the intricacies of the gateways of Maiden Castle, but must have inevitably turned aside into one or other of its many trenches to be trapped like a rabbit; and no attacking force could hope without terrible loss to fight its way to the great east gate of Battlesbury (Fig. 68), where the noteworthy features are the outer bastion and the way in

which the inner vallum is outcurved to envelop the main ditch on either side of the entrance-way.

Bat's Castle, in Dunster Park, a camp (Fig. 69) of oval plan defended by a fine double vallum of stone with intervening fosse, has two entrances, both showing singular features. That to the west has already been mentioned as having once been guarded by *tourelles*, of which the foundations were laid in mortar. That to the east, the

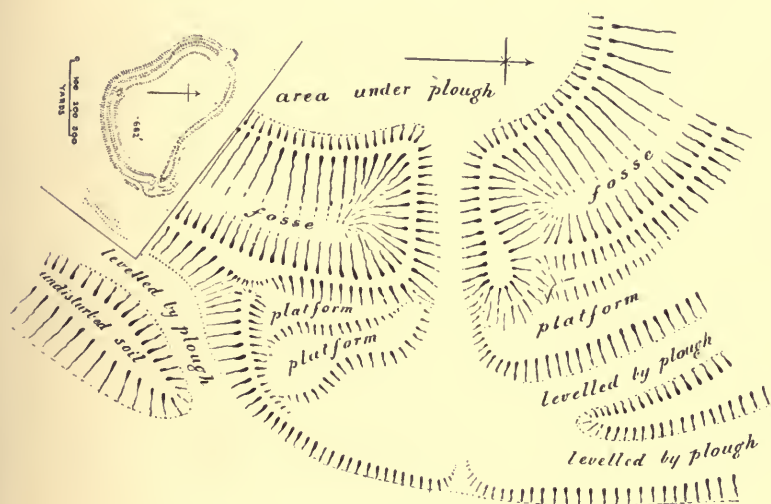


FIG 68.—EAST GATE, BATTLESBURY.

principal gate, is covered by a bottle-necked outwork 30 yards in length and 10 yards wide, flanked on either hand by prolongations of the outer vallum and fosse of the main camp, which are carried out with a right-angled turn on right and left of the actual gate, on either side of which the inner vallum is, as usual, considerably heightened, splayed, and slightly recurved, with traces of a guard-house on the outer face of the vallum to the right. In the camp at Duntishe there seems to have been a similar bottle-necked entry, made by carrying out-

ward the single vallum and its fosse,¹ but in this case the fosse remains on the outer side, whereas at Bat's Castle it is within the vallum.

At Blackbury Castle (Fig. 70), Southleigh (Devon)—an oval camp with one vallum and one fosse, both of very great size—the vallum is again thrown forward, as at Duntishe, for some 50 feet on either side of the single entrance, so

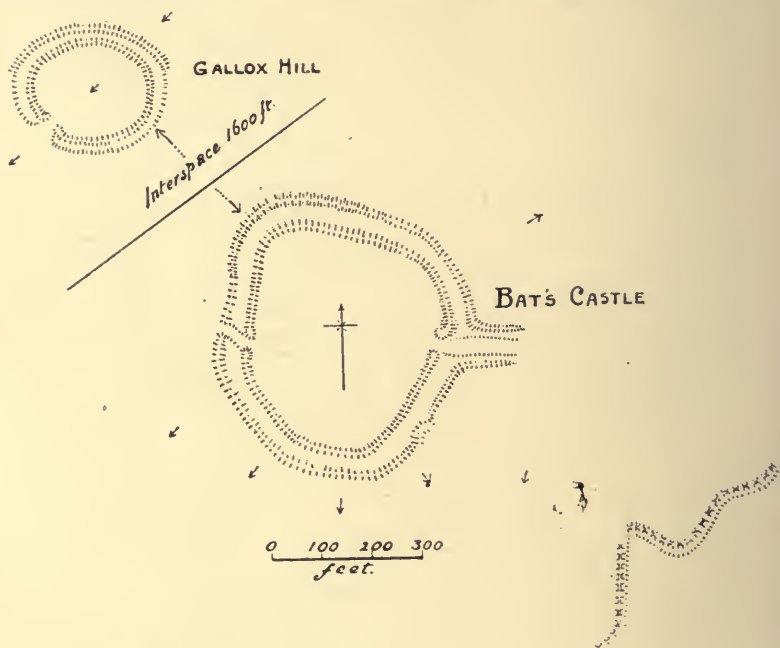


FIG. 69.—BAT'S CASTLE, AND GALLOX HILL, DUNSTER.

as to envelop the ends of the main fosse. At points some 150 feet away from the entrance to right and left, secondary ditches 12 feet in depth leave the main fosse, and, running outward for 250 feet as if to meet, suddenly turn inward and are continued for another 150 feet direct towards the gate. The material removed to form these secondary ditches is thrown up on the inner side at AA,

¹ Warne's *Ancient Dorset*,

on the outer side at BB. The result is a most formidable entrance-way, a narrow passage more than 50 yards in length, pinched between two great bastions. Both in plan and in scale the whole is a most unusual work. There is said to be something similar in design, but on a diminutive scale only, at Rink Hill, Selkirk, a circular fort of about $2\frac{1}{4}$ acres, with a ruined stone vallum 9 feet

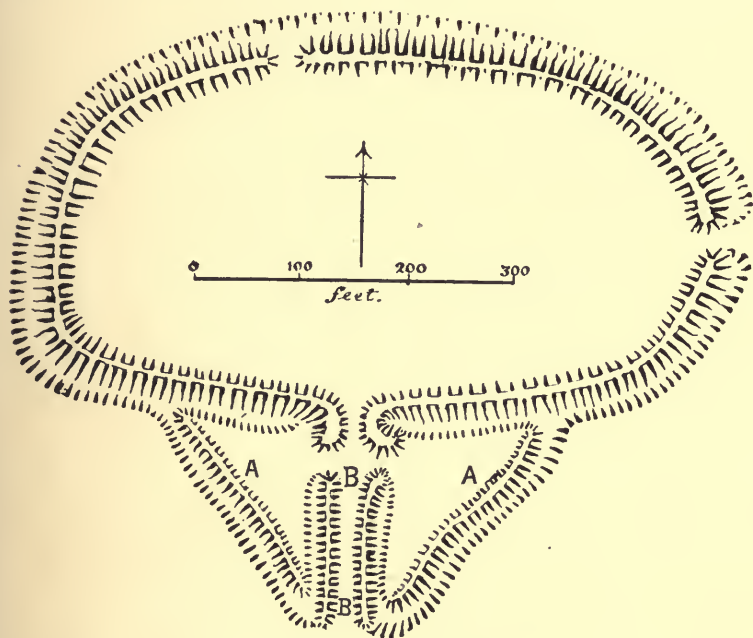


FIG. 70.—BLACKBURY CASTLE.

in thickness and a fosse $3\frac{1}{2}$ feet deep. Here (Fig. 71) the entrance is said to be “strengthened by a wall running on either side obliquely up the scarp from the bottom of the trench at the middle of the entrance, to join the main wall, thus forming a little closed work on each side of the inner part of the entrance.”¹

Quite as ingenious is the arrangement seen at Hembury

¹ Dr. Christison in *Proc. Soc. Antiq. Scot.*, xxix. (1895).

Fort, Honiton (Fig. 12). An assailing force, if able to make its way up the steep slope and past the successive lines of earthworks which enfilade the diagonal approach, would be face to face with three openings, and would naturally take the largest and central one of the three, only to find itself entrapped in a narrow passage-way, a *cul-de-sac* commanded throughout by two considerable valla. If by good fortune it took either of the alternative openings, it would still have to assault and carry this double line

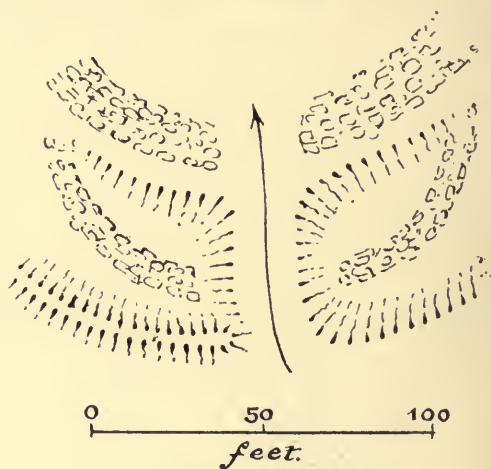


FIG. 71.—GATEWAY, RINK HILL, SELKIRK.

of wall crossing the area of the camp, and these could be held by the defenders with equal facility from whichever direction came the attack.

There can be no doubt that equal care was taken to safeguard the smaller postern gates, where these are to be found. At Hembury a spacious berm covers the eastern postern, and in most instances the approach to such entrances was so narrow and so steep as to make very dangerous the attempt to force it, there being room for the approach of only a handful of men at a time.

At Membury Camp, near Axminster, the chief entrance

is so arranged that any attacking force unacquainted with the right path would push forward to find itself caught in a blind recess (Fig. 72), commanded by a plunging fire from all sides.¹ It is possible that some of the supposed guard-houses, at Holne Chase Camp and elsewhere, may have had

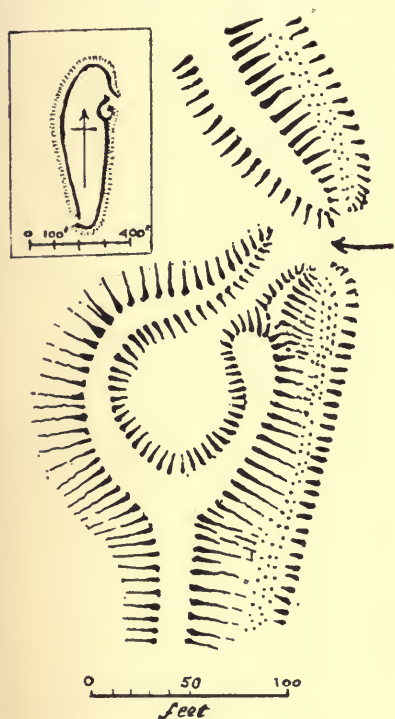


FIG. 72.—MEMBURY.

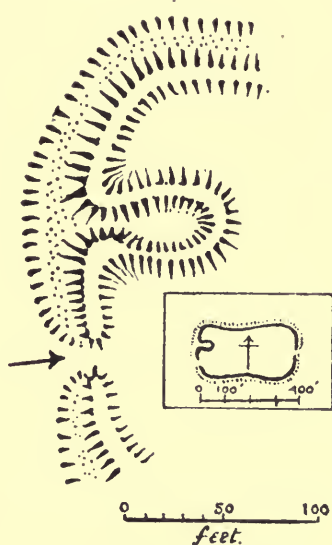


FIG. 73.—BERRY CASTLE, HUNTSHAW.

a similar purpose, although their comparatively small size is rather against this. In Berry Castle, Huntshaw, there appears (Fig. 73) a still more ingenious "pitfall," and to heighten the delusion the valla to right and left of its mouth are raised in the manner usual with gateways, while on either side of the real gate, some thirty feet to the

¹ There is something similar in the perplexing earthwork known as Sanvey Castle, Leicestershire.

right, they retain only the normal elevation and no tell-tale increase of height is noticeable.

In some instances the arrangement of the entries suggests nothing so much as some medieval maze. Buzbury (Fig. 74), midway between Badbury Rings and Blandford, is now but a sorry remnant, but when Warne

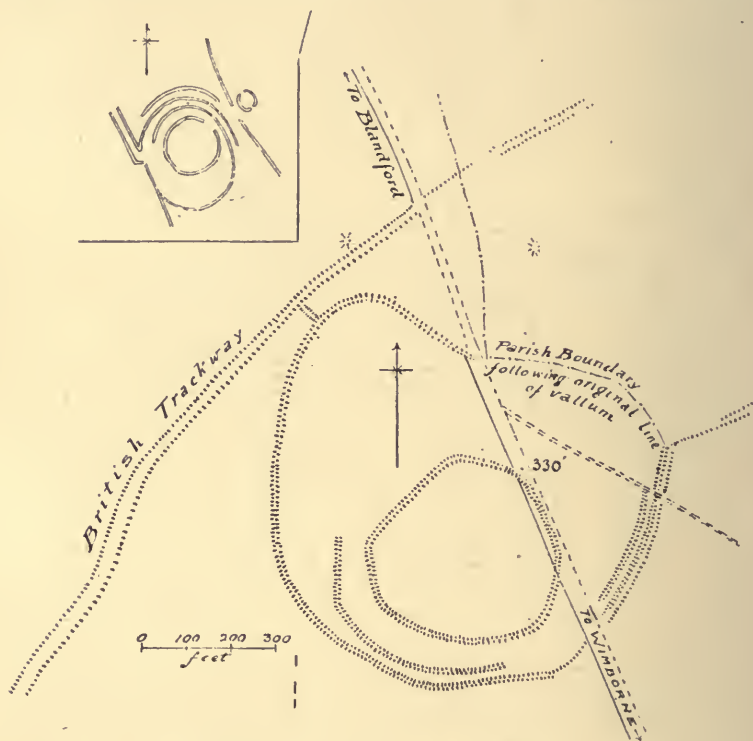
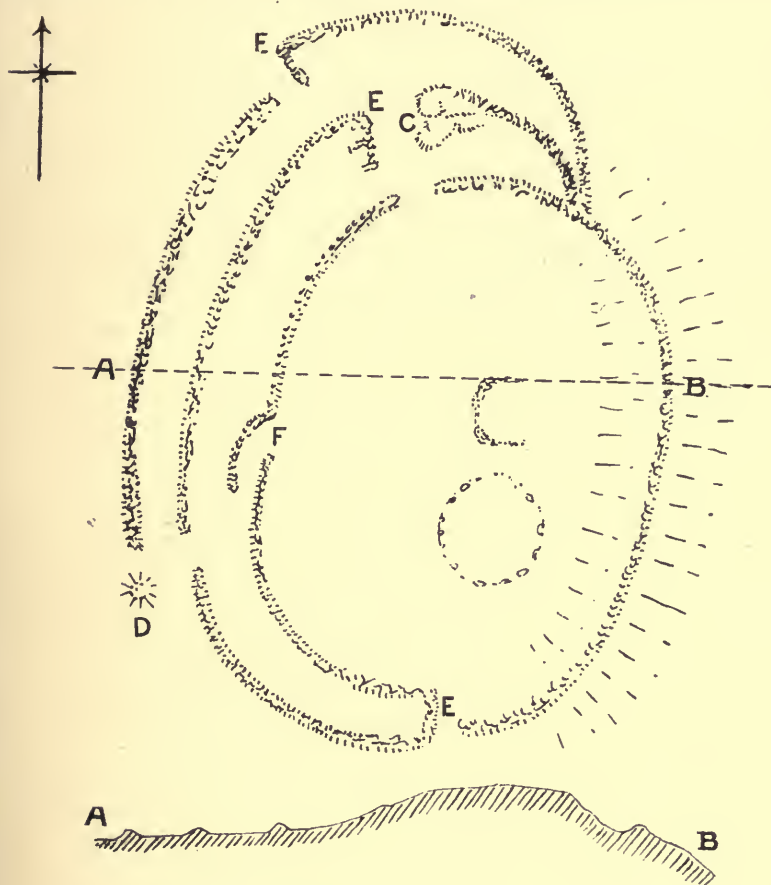


FIG. 74.—BUZBURY (inset after Warne).¹

mapped it its plan was remarkably intricate (see inset to Fig. 74). In his time there were abundant traces of habitations within the inner ring, and a remarkable out-

¹ The figure is given to illustrate further the destruction which may be accomplished in forty years. Whatever may be said of the accuracy of Warne's plan, it is obvious that there was far more to be seen of the camp—*oppidum*, he calls it—in his day than is now traceable,

work covering the entry from the north-east. At Cockburn Law (Fig. 75) there are three entrances, all so disposed as to be completely under command of the



Scale: 1 in. = 120 ft.

FIG. 75.—COCKBURN LAW.

defenders. At C was probably a guard-house. D is a block-house mound of the normal type. The abrupt deflexion of the walls at EEE is very remarkable, and the form of the exceptional entry at F is unusually well

preserved. Within the area are remains of huts which are characteristic of these stone-built Scottish forts.

It is a universal characteristic of the contour camps that

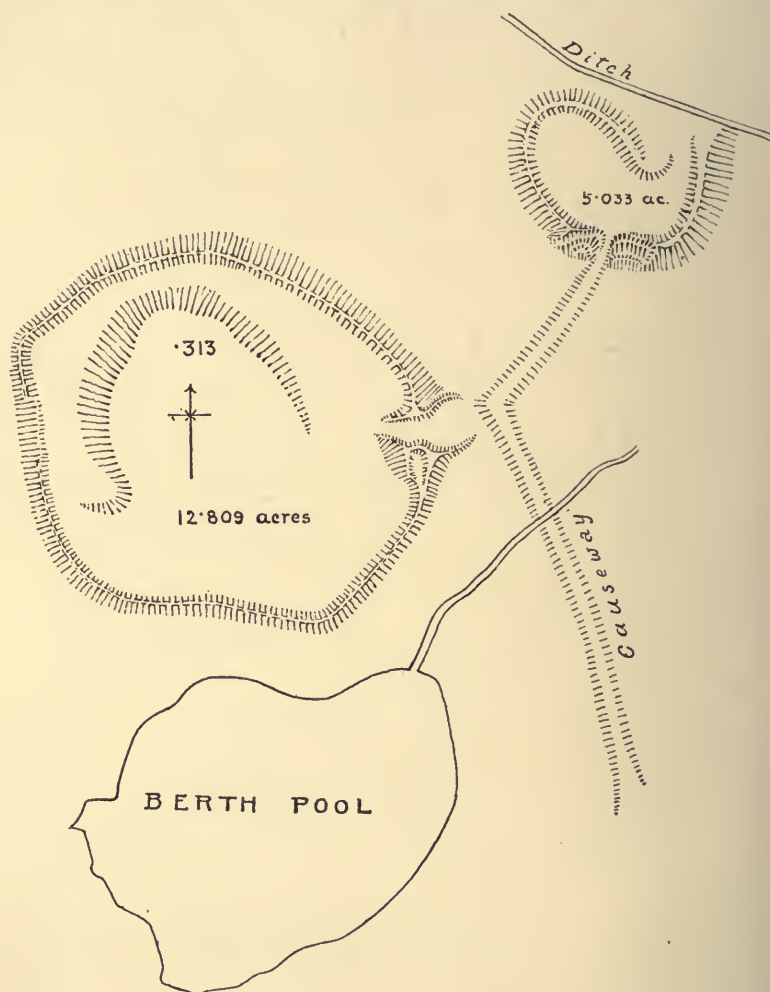


FIG. 76.—THE BERTH, BASCHURCH.

they never depend upon water for their security. Their ditches are dry, or if by any rare chance water is found in them, it is merely an accident. The site selected is almost

without exception dry. Nevertheless, a few curious exceptions occur. Near Baschurch, Shropshire, is a series of works known as The Berth,¹ consisting (Fig. 76) of two ring-works, each enclosed within a single vallum and ditch, and connected one with the other by a causeway, but both situated in the middle of what must have been in earlier times a permanent mere. There were elaborate defences on either side of the entrances, and an interesting feature was that the causeway did not actually enter either work but stopped short at the fosse, which must have been crossed by a timber bridge, exactly as in the Lake-Village at Meare. The same county has two other examples of camps located in marshes, viz. one on the eastern shore of Oak Mere, Delamere Forest, and another much larger, known as The Wall, five miles north-east of Wellington. The last-named extended to thirty acres, and was surrounded on all sides by bogs, marshes, and streams. Other examples are Belsar's Hill, Cambridgeshire (p. 137), Sutton Common, near Askern, Yorkshire (p. 246), and Thunorbury on Hayling Island, a ring-work lying little above sea-level, and possibly of later date.

As a rule a level site was preferred, yet in some cases, for no obvious reason, the camp lies upon a very decided slope. The more or less circular work known as Trendle Ring,² on the side of the Quantocks above Bicknoller, occupies a south-westward slope of great steepness,

¹ Described at length in Anderson's *Shropshire*, mostly quoting from Hartshorne's *Salopia Antiqua*, a valuable book despite its author's desperate plunges into etymology. In a paper published in the *Proceedings Soc. Antiq.* (1908), Reginald Smith, F.S.A., suggests that The Berth was possibly the site of the observatory of an Astronomical College of Druids, the text for this suggestion being the discovery in the surrounding bog of what appears to be a sort of water-clock of bronze.

² The name of "Trendle" (Anglo-Saxon, "a hoop"), or its equivalent "Trundle," is of frequent occurrence, e.g. The Trundle, near Chichester; Chisenbury Trendle, near Everley, Wilts.; Trendle Hill, at Cerne Abbas, Dorset; and Trundle Mere, Hunts. Prof. Skeat pronounces *Trendle* to be Saxon, *Trundle* Friesic (*Proc. Cambs. Antiq. Soc.*, No. xlv. pp. 336-7).

although the top of the hill above offers an ample area of comparatively level ground. The same is true of the little ring-work in Dunster Park, which likewise slopes to the south-west.¹ It is not unlikely that the question of drainage may have had something to do with the choice of such positions,² and the majority of the works thus situated seem to be of a simple and feeble kind, intended, perhaps, chiefly as cattle-rings. Placed as they are they at once forfeit much of the advantage of their locality. It is possible that a further object was to secure some degree of protection from the wind; and that this is not altogether an absurd suggestion is shown by the fact that the hut-builders of Dartmoor and Cornwall, and of the Welsh hills, took measures to avoid the wind. It cannot be merely a coincidence that the doors of the huts in Grim's Pound almost all face to the south-west, that the entries to the small circular works within the area of Hod Hill Camp open mostly to some point between east and south, that the huts in the British village at Greenshaw Hill, Greaves Ash, Northumberland, all face to a similar point, and that the huts on Saddlescombe, Sussex, all lay upon an eastern slope. Nothing again but practical utility could have prompted the building of elaborate wind-screens about the entrance of so many huts in Wales and elsewhere.³ These considerations may perhaps explain the position of such works as Hardwell Camp, below

¹ Another instance is Staddon Hill Camp, Exmoor, which is, however, a more elaborate work, with a number of interesting outworks, intended apparently to cover a spring immediately above the site of the ring-camp.

² To appreciate this one has to visit such places as Exmoor in winter. The rainfall is then torrential, as may be judged by the immense gutters constructed at every few yards to carry off the surface-water from roads at the very highest levels.

³ Along the western side of the curious rectangular huts at Trewartha Marsh, Launceston, has been thrown up a considerable vallum of earth, apparently to serve as a wind-screen. It was the same windiness which drove the inhabitants so often to make their cooking-holes in the fosses of their camp, *e.g.*, at War Ditches, Cambridge, and at Wallington, Croydon.

Uffington Castle, or that known as Berry Castle, Porlock Common, which, though 1,100 feet above sea-level, lies literally in a hole.

Even in the case of the hill-forts strictly so-called, although the site selected is usually the highest in the vicinity, this is not invariably the rule. There are a very great number of camps which, for no obvious reason, are so placed as to be commanded from higher ground, even when warfare knew of no more formidable missile than the sling. Burrington Combe Camp (Fig. 200) is completely dominated by the rocky eminence immediately to the south-east. Bell Hill Camp, Selkirk, is a Scottish instance, and the list might easily be multiplied. All that can be said is that the builders probably best knew their own business, and that warfare then was not what it now is. One obvious advantage of selecting the highest point was that the range of view was a safeguard against surprise; and where the camp was set at a lower level, without doubt higher points would be utilized as look-outs. This may be supposed to be the usual explanation of the occurrence of camps occasionally in pairs, usually a larger and a smaller work, lying at no great distance apart. Thus Dinghurst may have been an outpost of Dolebury, and Stockland Little Castle, near Honiton, an outwork of Stockland Great Castle only a quarter of a mile away; and the same purpose may explain the position of the small but formidable ring-work at Hawridge only a mile or so distant from the great camp at Cholesbury, Bucks. In other cases the relative positions are reversed, the larger work occupying the point of vantage. In all these cases, however, the difficulty is that excavation must first prove the two works to be contemporaneous. In such a case as that of Bat's Castle, Dunster Park, with its attendant ring-work close at hand, the latter may have been intended merely as a cattle-pound without strategic value, and placed below the crest of the

hill for purposes of concealment or of shelter. As the community increased in numbers and in wealth, it would be necessary to provide further accommodation ; and as no trace is discoverable in most cases of any attempt to enlarge the main fortress, the only alternative must have been the provision of subsidiary works at no great distance. Such subsidiary works would of course be upon a much less ambitious and less formidable scale than the main fortress,¹ and as a matter of fact it is unusual to find two camps of the first rank in very close vicinity. The case of the triple camps at Clifton, already noticed, is unusual. The three camps which occupy the three summits of the Clee Hills, Shropshire—Abdon Burf, Clee Burf, and Titterstone—are stone-walled enclosures, probably of much later date than the great hill-forts of the chalk, and, as the plentiful traces of hut-circles declare, were most likely different settlements of one neighbourly people. Amongst the Northumberland hills, and in some other parts of the North, the number of camps is astonishing, and in many cases the interspace is but half a mile or so ; but there is little difference in scale or plan to indicate which were the main works, which subsidiary.²

Pitt-Rivers was of opinion that the builders of the forts on the South Downs purposely selected positions such that the area, rising above the level of the enceinte, should give to the missiles of the defenders command of all

¹ Sixty yards south-east of the large circular camp at Tadmarton Heath, Oxfordshire, is a small enclosure of some 200 feet each way, roughly rectangular, and with remains of a fosse surrounding it. This may (if contemporary with the camp) have been such another subsidiary cattle-fold.

² There are a dozen camps within immediate reach of each of a dozen centres like Ingram, Bellingham, Doddington, and Wooler. "In Northumberland," says Canon Greenwell, "every hill-end has its place of defence ; in some instances two or three in connexion, one stronger than another." He concludes that we have here "the evidence of a number of small tribes living in a constant state of feud and warfare . . . each tribe independent, to some extent, of the others, though possibly all for certain purposes joined into a general confederation . . ." (*Arch. Journal*, vol. xxii. p. 100).

the approaches. It is true that many of the camps there and elsewhere do occupy such positions ; it is seen, for example, in the Devil's Dyke Camp, at Cissbury, at Mt. Caburn, and still more markedly in the Dorsetshire fortresses of Hambledon Hill and Chelborough. But, on the other hand, there are very many camps, of earlier and later date, in which no such disposition is apparent, although the natural features of their positions might very easily have been utilized to secure it ; and further in very many cases where it is found, the supposed advantage must have disappeared if, as is probable, the valla were crowned with stockades of some height. On the whole it would seem more probable that, where this feature is found, it is rather the result of accident than of design, due merely to the natural outline of the hills. Pitt-Rivers' idea seems to be based upon a rather exaggerated estimate of the range and effect of weapons in early times, and it may be doubted whether any missiles of the Bronze Age at any rate, let alone the Stone Age, could be relied upon to stop a rush. Nevertheless the very first concern of the defenders must have been to prevent the assailant from reaching the ditches of the camp, for once there he might turn the tables on the defenders and use their earthworks as cover for himself. He would at any rate have a fair chance to break or fire the stockade and so breach the defences. Doubtless stones were the usual ammunition of the earliest ages, hurled either by sling or by hand. Stores of sling-stones, whether flints dressed to shape or selected water-pebbles, have been found in many camps, and in others larger lumps of flint or other *imported* stone, which may have been intended for use as missiles.¹

¹ Within the camp on Whit Tor, Dartmoor, had been collected quantities of small sizeable stones heaped up into cairns. Examination showed that these were not the *débris* of ruined buildings, or burial cairns, and the conclusion arrived at by the explorers was that they must have been collected to serve as ammunition.

Of sieges and blockades it is practically certain the prehistoric period knew nothing. A single rush, a succession of rushes, at most a day's assault, was all that was to be feared, and a hostile force would more often confine itself to desultory raids and cattle-lifting, leaving severely alone fortresses of any size or strength. This consideration must at once discount much that has been written about the absence of any water-supply in these ancient fortresses. It was not until the methodical Roman came upon the scene, with his capacity for siege and leaguer, that the Briton would find it needful to reconsider the question of water-supply.¹

The elevated positions of the hill-forts make them convenient sites for beacons, and many of them have been so used down to the present time, but it is difficult to prove their use for that purpose in prehistoric days. The theory that, *e.g.*, Shoulsbury Castle, Castle Neroche, Ham Hill, Cadbury, Maesbury, Dolebury, and Brent Knoll passed on one to another the fiery signal round the whole circuit of Somersetshire—that Shoulsbury could “beckon” to Pen-y-fan in South Wales, and Maesbury to the great Wiltshire fortresses behind Warminster—is picturesque, but it implies a unity of purpose, a collectivism amongst the tribes occupying wide areas, for which there is no evidence; and even if such a feeling existed in the Later Celtic time, it can scarcely have existed in the remoter ages when the hill-top fortresses were first built. These camps were not constructed in order to serve as beacons, though subsequently utilized for that purpose. Many of the more conspicuous camps of Dorsetshire and elsewhere have been purposely planted with trees, or otherwise distinguished, to serve as sea-marks to sailors, who, for instance, still know Lewesdon Hill and Pillesdon Pen as “the Cow” and “the Calf.”

¹ See Chapter VIII.

The same objection disposes of those many and ingenious theories which have seen in certain groups of camps, larger or smaller, the carefully thought-out frontier-lines of certain tribes, or the chains of connected fortresses marking the successive steps in the advance of some conquering people. Thus the camps of the South Downs have been supposed to fall into three groups or chains corresponding to as many imaginary frontiers held against some invading tribe advancing from the coast; and a similar attempt has been made to reconstitute history by the aid of the camps of Wiltshire and Dorsetshire, and their supposed connexion with the various "Belgic Ditches"—Bokerley Dyke, the Wansdyke, &c.; while yet other theorists have tried to establish some relation between the three classes of camps—the very irregular, the less irregular, and the approximately circular—and as many different swarms of invaders, Lloegrians, Goidels, and Brythons.¹ Such speculations require no detailed refutation, and passing by any more particular objection it is enough to advance this general one, that they are all based upon the unwarrantable assumption that ancient tribes in the first place constructed each some one uniform type of earthwork, and in the second place entertained a broad and well calculated strategy, a unity of purpose, for which there is no evidence at all. There were no Vaubans in the prehistoric days, and no strategic frontiers; and ere the time came in which the early communities felt the calls of

¹ It has been thought that camps such as Yarnbury (Fig. 30), and Quarley Hill, above Grately, Hampshire, show reconstruction and improvement by a later people in the more regular form of their inner lines as compared with the outer. This may be so, but it requires proof; and in most cases such differences are more easily accounted for by the natural differences in the contours of the site. The crest of a hill may be a perfectly regular circle or oval, while a few feet lower down its slopes will present considerably less uniformity; and this increases with every foot of the descent. The conical appearance of a hill is usually an illusion to be dispelled by a glance at the O.M.

nationality in this vivid fashion, the hill-fortresses were in all likelihood abandoned for less formidable settlements in the lowlands.

Lastly may be mentioned the theory that most of the camps, and the hill-forts especially, were constructed to serve as camps of refuge only. In a certain sense every camp doubtless was so, but not in the sense suggested, which postulates a people living peaceable lives in undefended settlements scattered over wide areas of ground, who nevertheless concerned themselves to build and keep in repair some central fortress or fortresses to which, upon alarm given, they might resort for refuge with their flocks and their families. It would be difficult to cite from history any parallel system of society. Man usually plants his castle where it is of most use, and that is where are his goods and his chattels. It is incredible that a tribe, otherwise engaged, according to the theory, in the pursuits of peace, should be at pains to construct such a work as Maiden Castle, or for that matter such a work as Blacker's Hill, simply as a precaution against a possible day of danger; and in a state of civilization, in which the first news of danger must usually have been brought by the foe himself, it is not easy to see how the refugees could have made good their escape to their asylum, let alone driving off their flocks. Moreover, when careful examination has been made, it has usually revealed traces of permanent occupation such as would scarcely have been left there by mere refugees of a day or so; and the elaborate plan of some of the larger camps with their various divisions proves the same thing. The great camps were undoubtedly in most cases, probably in all cases, constructed close by, if not actually about, the actual dwellings of the builders. As civilization advanced they must have lost their original importance, dwindled in population, and finally become absolutely deserted, save when under stress of circumstances their builders,

or possibly quite another race of people, made use of them once more as strongholds; but built originally to serve only as *asyla* for potential refugees they assuredly were not.¹ That is a pitch of political and military foresight to which we have not attained even to-day.²

¹ Cæsar's words in reference to the British *oppida* (*quæ domestici belli causa præparaverant*, *B.G.* V. 9. 4) do not necessarily imply more than that the Cantii had previously built or used such *oppida* in some tribal war.

² Homer furnishes an example of the building of a fossed and ramparted camp, the despatch with which it could be completed, and its formidable quality. The Achæans, driven back upon their ships by the Trojans, hastily construct about their camp and vessels a wall and a ditch. The wall has "lofty towers"; the ditch is "deep and wide, a great ditch, and in it they set stakes"; and there was a gate (or gates?) for the passage of the horses and chariots (*Iliad*, viii. 436-441). Other details are furnished in the account of the subsequent assault upon these fortifications in *Iliad*, xii. The ditch was so deep that the Trojans' horses would not face it: its slopes were very steep, and were overhung on the inner side by stakes "large and closely set and sharp." These, therefore, were not mere obstacles (*cippi*) driven into the floor of the ditch, but a *cheval de frise* planted along its lip. The wall was near enough to imperil further any attempt to cross the ditch, but the interval (or berm) was sufficiently wide to afford room for pickets, each 100 strong (ix. 85-87). Double doors, turning on hinges and fastened by bars and bolts within, closed the gate (or gates). The wall is stated, in xii. 29, to have been built of "logs and stones," but this is admittedly a late interpolation. Walls and towers had breastworks, which were carried on *κρόσσαι*. This is the word (a rare one) used by Herodotus for the "steps" of the pyramids. The commentators suggest that it here means something in the way of corbels or "machicolations." More probably it means that the wall was stepped at the top, like that of the fortress at Worlebury and that at Tre'r Ceiri. The wall was so low that the top of the breastwork was within reach of a man's hand: Sarpedon tears down a portion of the breastwork, "and all the wall beyond was laid bare." Altogether the ditch and the wall proved so formidable that the attacking forces gave up the attempt to breach the defences and finally forced a way by the gates. The only reference to fire as a weapon of attack occurs (xii. 177) in a passage of doubtful meaning, and there it is probably metaphorical.

According to Professor Ridgway (*Early Age of Greece*), the Achæans were a Celtic people. Certainly the description of the fort which they built has remarkable analogies with many Celtic "camps" of England of the Pre-historic Iron Age.

CHAPTER VII

THE PRIMITIVE HOMESTEAD

*"Inde casas postquam ac pelles ignemque pararunt, . . .
Tum genus humanum primum mollescere coepit."*

*"Tents of a camp which never shall be raised,
On which four thousand years have gazed."*

THE veneration in which the Greeks held Hestia, "the hearth-goddess," the similar veneration in which the Romans held Vesta and her undying fire, the old myth that fire was Prometheus' first gift to the miserable human creature that he had fashioned from clay—all these point to the universal recognition of fire as one of the first and most valuable of those discoveries which have led up from savagery to civilization. It is not necessary to discuss here the method by which, or the date at which, it was first obtained. To the earliest of neolithic men it was certainly familiar, whether they dwelt in cave or in camp, upon kitchen-midden by the shore or upon crannog in the fens. It is certain also that, as was to be expected of a savage, man made use of his new discovery first of all for the benefit of his palate—used it, that is, for cooking, and by so doing lifted himself once and for all above the level of the other carnivora with which the palæolithic savage had fought for the shelter of caves and cliffs. Accidentally, through the use of fire, he learnt the art of burning clay to pottery, and as accidentally discovered the

means of working metal. The discovery of iron, which has been called man's greatest step along the path of progress, would never have been made without the previous discovery of fire.

Early as was the date at which the use of pottery was introduced, there are abundant traces in the British Isles of peoples who knew nothing of it, and were therefore compelled to do their primitive cooking without its help. It does not follow that these peoples were therefore the earliest of the Neolithic Age, or earlier than those who have left us both pottery and other still more advanced tokens of progress. It only means that they were in a lower phase of civilization. It is much more than possible that in these islands there lived contemporaneously peoples in very various stages of culture, and just as tribes of the Stone, the Bronze, and the Iron Ages lived side by side, so did tribes who were familiar with pottery and others who as yet had none.

In many parts of Ireland, and notably in the counties of Cork and Waterford, are to be seen low mounds made up of smallish broken stones, much fired and intermixed with charcoal.¹ These were the cooking-mounds of a people who seem to have possessed no pottery, doing their primitive cooking by the help of "fire-stones" or "pot-boilers." Selecting a spot close beside some convenient spring or stream, they dug a pit in the ground, and a channel to feed it with water as required. In the pit they laid their meat, and brought the water to boiling-point by flinging in stones made red-hot in a fire close beside it. The stones thus used were of the hardest available kind, and of no great size, rarely more than half a pound in weight, because bigger masses would be too slowly heated. The alternate heating and sudden cooling of the stones,

¹ In co. Cork they are said to be known to the peasantry as *folach fiadh*, "deers' lairs," as "deer-roasts" in Tipperary, and as "giants' cinders" in Ulster. The Welsh examples seem to have passed without name or notice.

which were used over and over again, naturally caused them to split, when the fragments were tossed aside and fresh stones were taken into use. The accumulation of broken fragments gradually built up an irregular mound near to and about the pit. In very many cases this mound is of horseshoe form, curving round the spot where stood the pit, its open side facing towards the stream. In other examples it is more or less circular, but lacking the obviously intentional symmetry and the proportional height of a barrow.

Numbers of such "cooking-mounds" have lately been noticed in South Wales,¹ in the counties of Cardigan, Pembroke, Brecknock, and especially Carmarthen. These are mostly of the circular form, varying in width from 6 to 50 feet, but rarely exceeding 3 feet in height. They are invariably within a very short distance of a stream, often actually upon its bank, and wherever they present the horseshoe shape their opening always faces to the stream. When opened they disclose nothing but fragments of fired stone and the fragments of charcoal and ash which were blown over them from the hearth.

Many of the Irish examples have been carefully explored. The pits, which averaged about 6 feet in length, were found to have been in some cases lined with rude planks, in others to have been formed out of logs rudely hollowed. In one of these were found some of the fire-stones as they had been left when the pit was last used.

So great is the number of the Irish mounds that it has been said that, in Cork and Waterford, "wherever there is a strong spring, there is generally a mound"; and much the same is asserted of those in Wales. That they must in some cases have been the result of very long use is shown by their size, and by the amount of ashes and

¹ See *Archaeologia Cambrensis*, sixth series, vol. vi. (1906), where Messrs. T. C. Cantrill and O. T. Jones gave particulars of upwards of eighty examples noticed up to the close of 1904. In another article in the same journal for 1907 there is given a list of sixty-three in Carmarthenshire alone.

charcoal which has accumulated over the hearth, in one instance to a depth of 4 feet. That they were the work of peoples unacquainted with pottery, or at any rate with any pottery capable of resisting fire, is shown by their very design, and so far no fragment of pottery has been found in or near them, nor indeed anything which might determine their age; for the chance finding of stone implements near some of them cannot be taken as proof. But that they are of very great antiquity is likely enough, and may perhaps be confirmed by the assertion that in one case near Cork a "Druidical ring of two or three circles had been built over the heap of cinders."¹ On the other hand, the standard of civilization in Wales and in Ireland has uniformly been so belated, that this fashion of cooking may have lingered there to a very late date. It may be remarked that the necessity of placing the cooking-pit within immediate reach of a stream, and generally therefore on wet ground, at once differentiates these mounds from funereal barrows. It is further noteworthy that, one instance at Carn-foch excepted,² they seem to have no connexion with other *vestigia* of antiquity such as camps or enclosures, or with any traces of settled habitations; nor are they commonly found in groups, although in one Irish locality as many as nineteen occur together. So far as the evidence at present goes, they would seem to be the work of peoples who had not yet arrived at the art of hut-building,³ and who had no

¹ In the absence of more precise information it may be doubted whether the "ring" in question was not a hut-circle such as is described below, in which case it may have belonged to a relatively late date.

² Within the "upper camp" at Carn-foch, Llangadock, there is one of these mounds beside a small pond, but there is nothing to show that it is coeval with the camp. It may have been there before the camp was built, or it may have been formed long afterwards.

³ Tacitus mentions (*Germania*, 46) a German tribe, the Fenni, who had no dwellings at all, sleeping on the ground in the open, or at the most putting up a rude screen of branches. He adds that they scorned agriculture. They were therefore nomads pure and simple, in no higher phase of civilization than most of the savages of the palæolithic time.

need to construct enclosures for the safe-keeping of any cattle; for cattle would not be well folded on boggy ground, and it is unlikely that early man would fold his flocks at any distance from his hearths, so that it would seem that the mound-builders had no cattle. If so, they were in a very low phase of civilization indeed, although, as has been said, this does not in itself necessarily imply a very remote antiquity.

Only a slightly less low degree of savagery is represented by the kitchen-middens, enormous accumulations¹ of shells—oyster, mussel, periwinkle, and cockle mostly—found at various points upon the coast of England, particularly in Devon and Cornwall, in south-western Wales, Scotland, and Ireland. These are the refuse-heaps of peoples who congregated on the spot, and subsisted chiefly upon fish and shellfish, although the bones found amongst the shell-refuse show that they varied this diet with such flesh as the chase provided. They knew the use of fire, they made a very rude kind of pottery, and they possessed flint implements of peculiar types, but they appear to have owned no domestic animals.² It is obvious that they were gregarious, but whether they spent all their days upon the same spot, or migrated to the coast from the interior at specific seasons, is not known. Nor do they appear to have left behind any traces of dwellings. If they were merely migratory visitants, their sojourn by the sea must have been in the warmer season of the year, when they might the better have dispensed with any shelter beyond the merest lean-to. But though there can be no doubt of their low degree of culture, it is not certain that they belonged, as has been

¹ Danish examples—they are common along the Baltic coasts—are recorded which measure 1,000 feet long, 200 feet wide, and 3-10 feet high.

² Bones of the dog are said to have been found, but split open; *i.e.*, if the dog was known, he was used as food. On the other hand, the bones were perhaps rather those of the wolf than of the dog.

thought, to the very earliest neolithic times, for some of the weapons found in the middens appear to be "palimpsests" fashioned out of other weapons of much higher types. This would seem to suggest that the people of the kitchen-middens were the degraded contemporaries of other more cultured folk, the broken fragments of whose superior weapons they picked up and refashioned according to their ability. It is significant that of the British examples most¹ are found upon the remoter west, south-west, and northern coasts, illustrating the fact that the tide of civilization has always flowed from the east and south-east, continuously pushing before it the more backward races.

On the ancient "forest" of Dartmoor are a number of stone enclosures, rudely circular for the most part, and surrounded by dry-built walls more or less ruined. Locally they are known as "pounds," and the largest, most perfect, and most elaborate of them all is Grim's Pound (Fig. 55), $4\frac{1}{2}$ miles south-west of Moreton Hampstead. The wall encloses an area of some four acres, within which are the remains of twenty-four rude huts of irregularly circular plan. Most of these were found on exploration² to have contained each a hearth-stone and a cooking-pit. The pits were mere holes sunk into the floor, not more than 2 feet long, $1\frac{1}{2}$ feet wide, and 9 inches deep, and roughly lined with thin slabs of stone. Numbers of cooking-stones, much fired and cracked, were found, but only the scantiest traces of very rude pottery. Like results attended the examination of similar huts on Broad Down (where the "pound" known as Broadun, more than 12 acres in extent, is reputed the largest of all the prehistoric enclosures of Dartmoor) and elsewhere.

¹ Examples are known, however, upon the Sussex coast from Newhaven eastward.

² They were explored by Messrs. S. Baring Gould, R. Burnard, and others. See *Transactions of the Devonshire Association*, xxvi. (1894).

These pits correspond exactly with those in use amongst the Assiniboine Indians of British North America, whose name is said to mean "pit-cookers." The principle is precisely the same as that of the Welsh and Irish cooking-pits, but with a decided advance upon those. For in the first place, as they are not fed by running streams, they must have been filled by hand, which, while it accounts for their much less extravagant size, implies a certain independence in the choice of sites. In the second place they evidently belonged to a people who had, as well as the means of carrying water, permanent residences and huts to live in. The northern part of Grim's Pound crosses a small stream known as Grim's Lake, but the nearest hut was at a distance of 60 feet from the water, and others were from 200 to 400 feet away, and as the ground slopes upwards to the south the water could not possibly have been conveyed to the pits otherwise than by hand. In the third place the builders had developed some sort of communal society, and owned cattle; for the size of the pound is too great to be otherwise accounted for, and, moreover, there are certain subsidiary enclosures within it which, from the exceptional width of the doorways and from other features, would seem to have been intended as cattle-pens. The explorers came to the conclusion that this¹ and similar enclosures were constructed to serve as the central strongholds of a population scattered over the neighbouring moors, and that only a small number of them permanently occupied the huts within the pounds. Their state of culture ranged from that of the very early Neolithic Age down to the early Bronze Age. The excavation of similar groups of huts at Legis Tor and other places produced rather more pottery, with some indications of improved culture, but as it is almost certain

¹ It had previously been attributed to the Druids, to the Phœnicians, and to later tin-streamers, at the fancy of individual speculators. As to the meaning of the name of Grim, something is said in Ch. XV.

that the huts were occupied over long periods by successive peoples,¹ little can be argued from this. Some of the huts, as at Foales Arrishes,² on Blackslade Common, showed a curious refinement, the cooking-pit and hearth having been relegated to a small annexe; others of small size with cooking-holes of disproportionate size are thought to have been used for vapour-baths; and yet others, larger in size and unprovided with hearths, seemed to have been intended for occupation in summer.

Of the Devonshire "pounds" the majority are simple enclosures so weakly defended that they can never have been "strongholds" in the sense in which the hill-camps were such. There are good examples of the larger kind in Dunnabridge Pound, at Merivale Bridge, and on Teigncombe Common. Near Postbridge on the Dart, within an area little more than a square mile, Mr. Burnard counted as many as fourteen, and others have since been noticed, some having owed their preservation to their having been adapted as they stood to serve as the enclosures of "new-takes." Traces of huts are visible in or near most of them, and they vary in size from a diameter of 50 yards or less to an area three times as great as that of Grim's Pound. So numerous are these vestiges of a large population in the vicinity, that Mr. Burnard dubbed Postbridge, which to-day consists of an inn and nothing more, "the Metropolis of the Moor," but in other localities the ruins of huts and pounds are almost as thickly scattered about. On Standon Down, above the

¹ The Rev. S. Baring Gould has been one of the most prominent spirits in the exploration of the antiquities of the Moor. Many of his results are to be read in the *Transactions* of the Devonshire Association, and they are summarized in popular form in his *Book of Dartmoor*. He lays emphasis upon the curious fact that, densely peopled as the Moor obviously was in Neolithic times, it apparently remained deserted thence onward to the later Middle Ages. Nothing has been discovered referable to Late-Celtic or Roman, or even to Saxon times.

² "Arrish" is a Devonshire word meaning stubble.

Tavy, is a group of more than seventy huts, though there is no trace of a pound at this spot.

The wall enclosing Grim's Pound (Fig. 55) proved on examination, like those of the camps of Whit Tor and Brent Tor, to have been originally double, two parallel dry-built walls of a width of 3 to $3\frac{1}{2}$ feet enclosing a continuous passage-way of the same width. The original height was perhaps $5\frac{1}{2}$ feet. Each wall was built of flat retaining slabs of the local fissile granite set endwise in the ground in two lines and filled in with loose stone and turf. The purpose of the inner passage is not clear. A common feature in the walls of stone forts¹ of later age, it is generally believed that in their case the passages were intended to serve as storage space, an explanation which will hardly suit the case of Grim's Pound if, as seems probable, the passage was never roofed in. It is possible, however, that it was once roofed over with boughs and turf. According to another view it was intended to be filled up with earth upon which might be erected a stockade. If so the design was never carried out, and the apparent occupation of the pound for a considerable period is decidedly against this view; nor is it clear that any advantage would have been gained, whether in the saving of labour or otherwise, by using earth for the purpose rather than the small stone everywhere available. The great majority of the Devonshire enclosures show no traces of such elaboration, and for the most part occupy positions too open to have been defensible. Like the dry-built enclosures of the Cumberland Fells² they seem to have been intended

¹ There are examples, for instance, in the fort of Castle Hayne, Kirkandrews, and the immense Irish forts of Stague and Crinnan Aileach. In the first-named case the passages, which have a uniform width of $3\frac{1}{2}$ feet, are not continuous, though they run almost the entire length of the sides of the fortress, which is presumably pre-mediæval.

² See an article by Swainson Cowper, Esq., in *Archæologia*, liii.

for purely domestic purposes, and have nothing in common with "camps" properly so styled.¹

The huts within Grim's Pound, conformably to a well-known Devonshire type, were built as follows:—Flat retaining-slabs were planted in a rough circle of a diameter of $6\frac{1}{2}$ to $15\frac{1}{2}$ feet, one opening being left for an entrance. The average height of the slabs was about 3 feet.

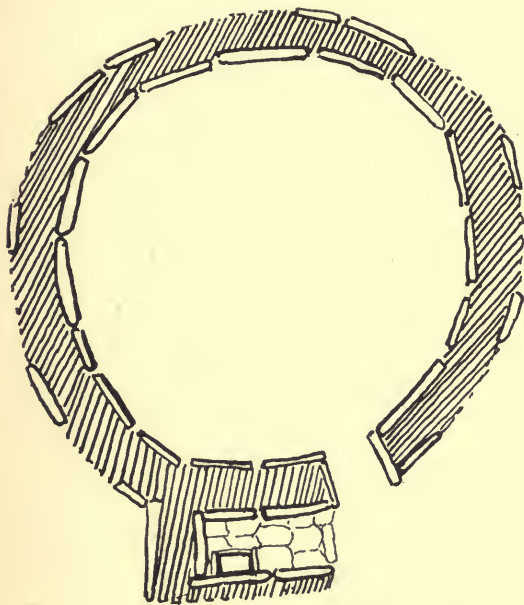


FIG. 77A.—HUT, DARTMOOR TYPE.

The intervals between these uprights were filled in with smaller pieces of stone, and the whole was backed with turves, which effectually stopped the draughtiness of such walls. Across the entrance was laid a block of stone as a

¹ Rev. S. Baring Gould remarks upon the pacific character of the remains of these primitive people. Weapons are rarely found; there are faint traces of agriculture; the signs of any knowledge of weaving are rare. On the Moor itself is not a single fortress properly so-called: round it lie some thirteen, five of them stone-built, the rest of earth and stone.

lintel, the opening being usually only some $2\frac{1}{4}$ feet high and $2\frac{1}{2}$ feet wide. In most cases it faced to the south-west, and in some instances was furnished with a sort of porch so arranged as to screen the draught. The floor was of beaten clay, occasionally paved with rough blocks of stone. All the huts stood upon a slight slope, and in nine instances there was constructed within the hut at the higher (south)

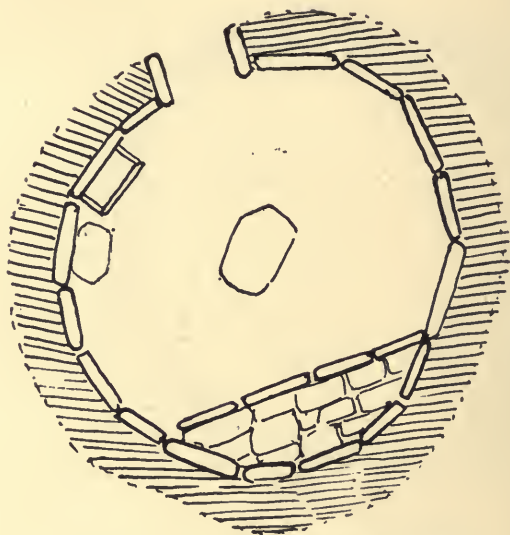


FIG. 77B.—HUT WITH DAÏS, DARTMOOR.

side a sort of daïs, from 8 to 12 inches high, which may have served equally well for a seat or for a sleeping-place.¹ Near the centre of the floor was a flat stone which probably carried a post supporting the roof; for the absence of any great amount of debris within the huts showed that they could not have been roofed with stone, but probably with turves and fern laid over rafters formed of boughs. The huts contained also each a hearthstone, with evident

¹ A similar arrangement was met with in other cases, *e.g.*, at Broadun, Shapley Common, and Langstone Moor, but was unusual. It has been found in other parts of the country, as at Pen-y-Gaer.

traces of fire, and one of the cooking-pits above described. Certain small enclosures which showed only the upright retaining stones, with no trace of filling or backing, no hearths and no cooking-pits, but having doorways of greater width, were thought to have been used as cattle-pens.

With slight variations this seems to have been the usual method of building huts wherever suitable stone was

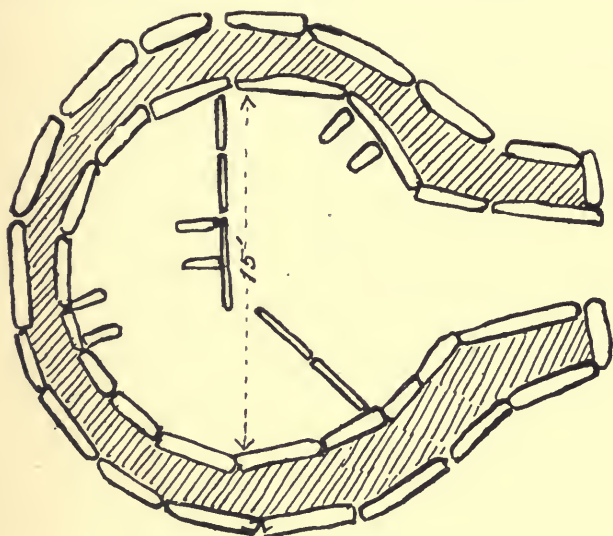


FIG. 78.--HUT, ANGLESEY TYPE.

available. The Welsh and Northumbrian hills are dotted over with the ruined rings of such dwellings, known to the Welsh as *Cutiau'r Gwyddelod*, "huts of the wood folk."¹ As a rule the retainers are all that is left, and these rise but slightly above the turf which has overgrown the site, but their regular design and small size make them at once recognizable. In many cases the ring is double, the

¹ Gwyddel=Goidel=Gael. See p. 7, note. There is a tradition that the Brythonic Welsh adopted the Gaelic Irish way of hut-building in consequence of the destruction of the forests in Roman times. These Welsh huts are, of course, in very many cases far older.

interspace filled in with small stones or with earth. Upon these there may have been raised courses of turves,¹ but it is probable that in many cases the walls were never carried up to any considerable height, but that large boughs, firmly planted between the retaining stones of the ring-wall, were bent over to meet above the centre of the floor, these being covered in with heather, fern, turves, or perhaps skins, and in some Welsh examples with rough slates. In such cases, to compensate for the lack of height, the floor is usually sunk to some depth, as little as 2 feet or as much as 6 or 7 feet; and to prevent the inflow of surface water the rim of the pit is slightly raised all round. This plan was very noticeable in the huts within Eggardon Camp, where, moreover, the bottom of the hut was uniformly filled in with some 2 feet of loose flints to secure a dry floor. The huts within the great fortress of Tre'r Ceiri, on Yr Eifl, showed a yet greater elaboration in this direction:² the natural peat was first removed from the surface, and the hollow thus formed was filled in with loose stone, which was in turn covered with a rude

¹ It is doubtless the decay of these turves has so frequently buried, or almost buried, the stone ring which served as a foundation. Turves, like bricks or squared stone, may be built up so as to form a perpendicular wall, and are, moreover, impervious to the wind and rain. The persistent assertion of bygone antiquaries that the stone-built Wall of Hadrian was preceded by a wall of turf was shown to be correct only two years ago (1906). The use of turves enabled the builders to obtain a far more steep and unassailable face to their wall than was obtainable by the use of earth or of earth and stone together. Any one who desires to test the amount of shelter, warmth, and comfort which a turf-hut may afford, need but get inside a grouse-butt on the moors on a windy day. These butts are in fact nothing but modern replicas of the prehistoric hut *minus* the roof. They are commonly made with a circle of rude stone carried up perhaps a couple of feet, and strengthened here and there with retainers. Upon this foundation are laid successive courses of turf to the required height. In two or three centuries the ruins of such a building will probably be mistaken by amateurs for those of a prehistoric hut-circle, and only excavation will reveal the evidence of their real date in the shape of old cartridge-cases.

² Rev. S. Baring Gould and R. Burnard, Esq., in *Archæol. Cambrensis* (1904).

pavement of flat slabs. In some cases the loose stone was dispensed with, and the floor was made of flat slabs set edgewise. One or two huts even showed gutters for carrying away any moisture from the floor. Tre'r Ceiri, however, is apparently the work of a far later age, probably dating only from the very last days of British independence in the first century A.D., and the huts (Fig. 79) show no such uniformity of plan as is found in earlier examples. They are arranged simply, in groups, and in clusters; some of them have two or more compartments, and many have

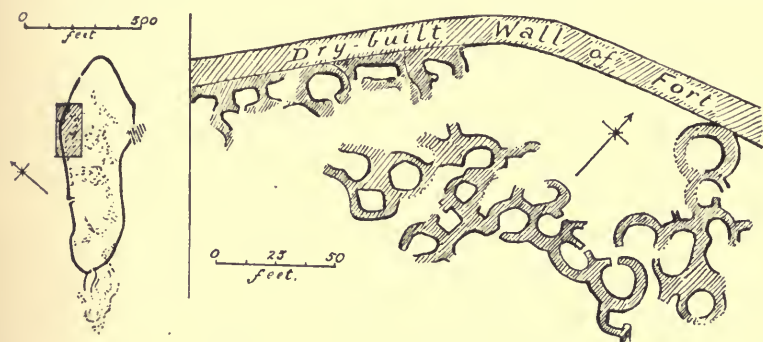


FIG. 79.—HUTS IN TRE'R CEIRI.

wind-screens or other provision for avoiding draughts. They are of every shape, the walls built up of loose stone which in some instances still stands to a height of 6 feet and a thickness of 4 feet. Perhaps the walls were originally calked with moss or fern to make them impervious to the wind; and the wind on the crest of Yr Eifl (1,590 feet) is not to be laughed at.¹ None of these dwellings

¹ In his *Notes of a Tour through the Western Isles of Scotland* in 1768 one James Robertson describes the huts of the inhabitants of Arisaik as being built up of wattled heath and branches, overlaid on the outer side with thin turves "much in the manner that slates are laid," and roofed with turf, heath, and straw. He continues in reference to the crofters of Contar: "Their barns and houses are built in the same manner as hath been described, only the former have no turf fastened upon their outer side from the ground up to the easing, so that the wind blows through all parts of the

showed any trace of cooking-pits, nor was it to be expected, seeing that they belonged to a people familiar alike with pottery and with metal. But neither are there any such pits in the huts at Eggardon, which are of a very early date indeed and reveal no trace of metal.¹ The cooking at Eggardon must have been done outside the huts, perhaps in the fosses of the camp.

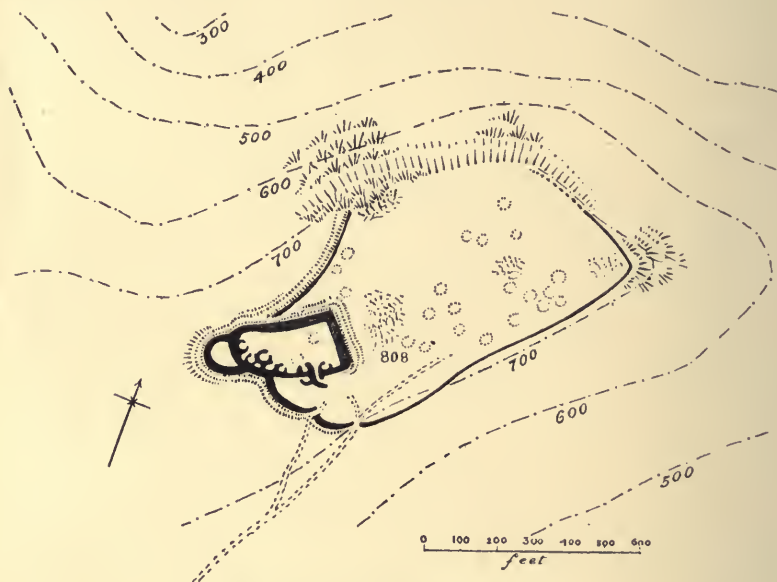


FIG. 80.—CASTELL CAER SEION.

Castell Caer Seion,² on Conway Mountain (808 feet), a mile and a half from Conway, is a well-preserved specimen (Fig. 80) of a small Welsh hill-fortress. Its outer wall of rudely built stone closely follows the 700 feet contour line, save on the north-west side, where the precipitous

barn with freedom and dries their corn." Quoted in *Proc. Soc. Antiq. Scotland*, vol. xxxii., p. 14. Many of the huts at Tre'r Ceiri and elsewhere may have been left uncalked for the same reason.

¹ Dr. Colley March, in *Proc. Soc. Antiq.*, Series II., xviii., p. 258.

² Called also Caer Lleion. Something is said of it in *Arch. Cambrensis*, vol. i. (1846).

fall of the hill makes needless any such defence. The actual summit of the mountain is crowned by an inner fortress measuring only about 150 yards in length and 60 yards in breadth. Towards the north-east, the weakest side, this is defended by a formidable wall of stone, its outer facing carefully coursed, and this again is covered by two fosses. To the south also the wall is very thick, though no fosse is traceable. On this side is the entrance, of which the retaining-stones and jambs are still *in situ*. The north-west wall, much weaker, is covered by a fosse which sweeps round the south-west end of the citadel, and thence runs east along the outer wall, in which is a second gate immediately facing the first. The south-western extremity of the inner fortress seems to have been walled off. Immediately adjoining this is a large hut-circle with a double ring-wall filled in with rubble, and just within the entrance is another of smaller size, its floor considerably sunk, the sides carefully pitched with coursed stone. Other circles are scattered about the area, and over the whole of the outer camp to the eastward. There is another ruined work on Alltwen (828 feet), three-and-a-half miles W.S.W.

While the character of such hut-circles, once they are seen, is almost unmistakable, the question of their date is a matter to be determined only by excavation. The methods of man change very, very slowly, and most slowly of all the methods he employs in matters domestic, in building and in farming. Constructions very similar to the *Cutian'r Gwyddelod* continued to be erected even in England down to very late times indeed by miners and shepherds, so that great caution is needed in attributing to such *vestigia* any very venerable antiquity. Built in very much the same rough-and-ready fashion, the newer work has quickly weathered to an appearance exactly like that of the older. It is only from the concomitant

presence of other and indubitably ancient traces that one can even tentatively presume the antiquity of pounds, *cutiau*, and other such ruins, which are to be found every-

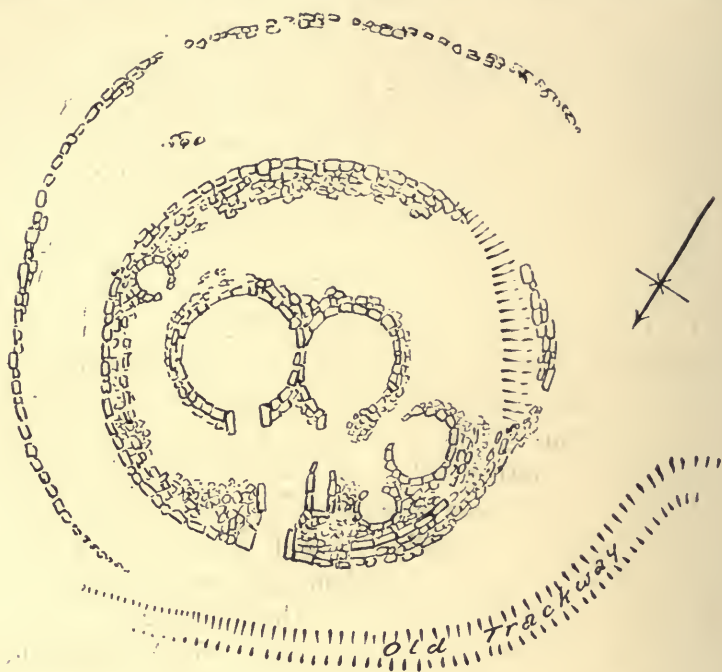


FIG. 81.—LLANFAIRFECHAN.

where upon the hills of Wales, Northern England, Dartmoor, and Cornwall.¹ The annexed plan (Fig. 81) is that

¹ It has been proved by excavation that huts of the type of the Bronze Age continued to be used far down into the days of the Romans in Anglesey, Samian pottery and Roman coins having been found within them. Huts quite as rude continued to be used in many of the remoter parts of Scotland up to the end of the last century, in localities where wood suitable for building purposes was scarce, nor are they altogether abandoned even to-day. See Mitchell, *The Past in the Present*. These huts have neither windows nor chimney, and the materials of the roof—straw, bracken, heather, &c.—used periodically to be stripped off to be used as manure. The animals shared the exiguous accommodation with the owners, and it is a disconcerting fact that persons reared under such roofs were as healthy, strong, and good looking as their more civilized compatriots.

of a group of ruins behind Llanfairfechan, Caernarvonshire. It is quite possible that these are only the remains of some shepherd's fold or farmer's hovels of quite late date; but the fact that they stand close beside a very ancient trackway leading from Bwlch-y-ddeufaen to Pont Newydd, in a tract of moorland littered over with the ruins of similar enclosures, huts, and dolmens, raises a presumption that these also are old.¹ But even so the remains may very well have been tampered with by later

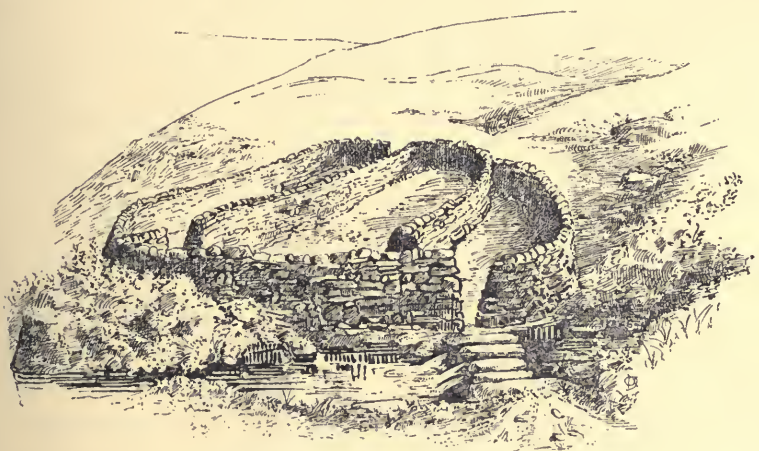


FIG. 82.—YORKSHIRE SHEEPFOLD.

hands, who found them adaptable as sheepfolds or cattle-pens. The same doubt attends many of the enclosures on the Fells, where during long centuries the unrest of the Border prevented any material advance in the methods of building.

Fig. 82 shows one of the rude sheep-pens built by the shepherds of the Fells for convenience in washing their sheep. It is obvious that such a structure, dry-built of small stones, with walls unduly thin for their height, is

¹ The plan given is from a sketch made some fifteen years ago. In *Arch. Cambrensis*, vol. i. (1846), H. Longueville Jones gave a plan of some ruins very similar.

very easily ruined, and within a very few years the rapid growth of heather and whortleberry about its debris would leave discernible nothing but the vague ground plan of what might readily pass for a group of huts of prehistoric age. There would be nothing whatever to indicate to the ordinary eye the entire modernity of the remains. Only the practised observer would be able to determine whether the stones had lain there a longer or a



FIG. 83.—BAGHAN GALLDAIR.

shorter time, and only the expert again would notice the tell-tale fact that no large stones had been employed. The greater size of at least some of the stones used is a fairly safe test of really ancient work. The savage took the trouble to find and move blocks of a size which the modern shepherd, and even the modern road-mender, will leave severely alone.

In Ireland similar constructions, known as *Bawns* (*Baghan*, *Badhan*), attracted the notice of writers as early as the sixteenth century. These enclosures were intended for use as folds, and were built to shelter the

herdsmen as well as their cattle. They occur also in Scotland. Baghan Galldair (Fig. 83), for example, is a rough circle of 22 yards by 24 yards, surrounded by a dry-built wall 8 feet in thickness, with two entrances on opposite sides. The ruins of two hut-circles abut upon the inner side of the wall. Baghan Burlach (Fig. 84), said to be unusually large, conforms to the contour of a knoll of

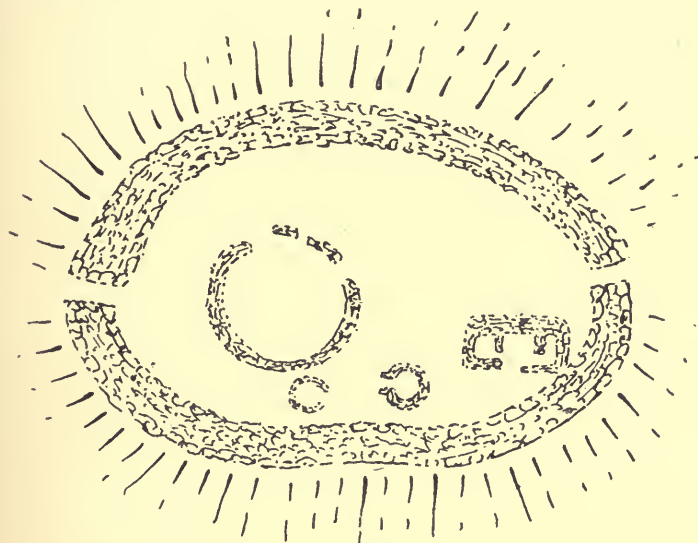


FIG. 84.—BAGHAN BURLACH.

elliptical plan, and surrounds an area measuring 56 yards by 34 yards. Its wall is 11 feet thick and its entrances are two, one at each end. Near the centre of the enclosure are the remains of a very large hut of 39 feet in diameter.¹

The so-called bee-hive huts mark a very decided advance in the art of building. In these the roof is formed by building up successive courses of unhewn stones, each overlapping that beneath it, until the whole can be

¹ *Proc. Soc. Scot. Antiq.*, xxix. (1895).

covered in by a single large flat stone.¹ Familiar in a far more refined form to students of Hellenic archæology, examples of this type have been found in Cornwall, Devon, and the Isle of Portland. It has not been proved that this improvement in building necessarily implies any very great advance in the general standard of culture; it might be merely the natural outcome of the character of the district and the local stone. Unlike some of the Greek examples, the English bee-hive hut is mostly very small, a roughly circular construction of from 4 feet to 8 feet in diameter. Quadrangular specimens are less usual, and not seldom the hut is merely a lean-to built against some convenient mass of rock. The Rev. S. Baring Gould cites an example, "on the river Erme, above Piles Wood," on Dartmoor, which is "still completely water-tight," and another in Cornwall, between Brown Willy and Rough Tor, which the tenant of the ground has preserved from destruction to serve him as "a pig-stye or a butter-house." On the sides of Rough Tor there are said to be "hundreds" of them, and apparently the building of huts of this type was practised contemporaneously with those of the type seen at Grim's Pound. In almost all West-Country examples the dimensions are very small—too small to allow of a man's standing upright within, and to enter them one must crawl on all fours.² Whether or no the inhabitants of the southern and south-eastern counties were of a taller race, they certainly built larger dwellings, but of another kind, just as they built also finer camps.

Stone huts, like stone-built fortresses, have too often been greatly damaged, if not entirely destroyed, by the removal of their material for building or for road-metal.

¹ The same method was followed in forming the roofs of some of the chambered barrows, which are of the Stone Age.

² Beehive huts are abundant in Kerry and other parts of Ireland, and in Lewis. Most of them are small, but there are exceptions: some of the Irish examples are said to have been large enough to hold forty men,

As enclosure and cultivation have gone less far in Cornwall than in most counties, it can show more and finer specimens than occur elsewhere. The best known group is that at Chysoyster,¹ three miles north of Penzance, now a mere remnant. Originally this was a circular fortress enclosed within two concentric walls. Of the outer wall scarce a trace is left: the inner was more massive, dry-built, with one entrance only. In the space between the two walls are the remains of a dozen or so of isolated huts, all of one uniform oval shape and once roofed in the usual bee-hive manner. Within the thickness of the inner wall are several others opening upon the central area, which is itself clear. There is another very similar cluster at Old Bosulow, just north of Chûn Castle, three miles north-east of St. Just. Three-quarters of a mile south-east of Chûn Castle, at Bodennar, is a third group of different plan (Fig. 85); two circles,

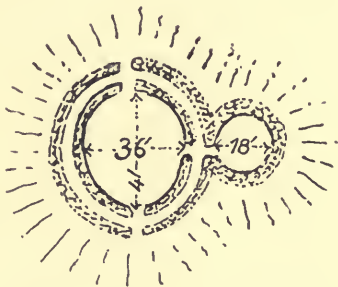


FIG. 85.—BODENNAR CRELLÂS.

the larger 40 feet across and the lesser 21 feet, are united by a passage 6 feet in width. The larger circle is contained within a double concentric wall braced at intervals by transverse walls.² Almost hidden by gorse and heather, at a short distance the whole has the look of a single green mound, whence its name of Crellâs (*Cry-glâs*, "green hillock"). Finally, at Bosporthennis, near Gurnard's Head, three miles north-east of Chûn Castle, in a spot littered over with the ruins of other

¹ The name signifies "Bee-hive." For this and similar groups of Cornish huts, see *Proc. Soc. Antiq.*, ii., xvii., 79.

² The illustration given is after W. C. Borlase (*Antiquities of Cornwall*). Even in his time the transverse walls were so much ruined as to escape notice.

huts and the debris of an enclosing wall, is "probably the most perfect specimen now remaining in England." It is a double hut of two rooms, one circular, the other rectangular. The circular room has a diameter of 13 feet, and the other measures but 9 feet by 7 feet. In the wall of the latter, 4 feet from the ground, is a window about 12 inches square. The doorways, with their lintels and jambs, are in excellent preservation, and the principal entrance faces to the south-west. Huts of this type, rare in England, are more frequent in Ireland, where they are popularly believed to be hermits' cells, the rectangular chambers passing for oratories. This Cornish example may be of similarly late date, or the rectangular chamber may be a later addition made in Christian times to an older hut then rebuilt and repaired. A curious group of huts at Trewartha Marsh, near Launceston, is supposed to belong to the Iron Age. They are—or rather were, for most of them have been destroyed—all rectangular in plan, and constructed upon a much more spacious scale, cross-walls dividing the main chamber into separate apartments. One of the largest chambers was provided with a continuous stone seat running the whole length of the side and terminating in a single seat exactly like an arm-chair. It has been fancifully named the Council Chamber, and may not improbably be a good deal later than is supposed.

As to the age of these clusters of huts, their elaborate plan, not less than their more careful building, proves them to be a development from the ruder and simpler huts of stone. But this in no way determines their date, because it is not known at what period the building of "bee-hives" came in and went out in any given locality. There is reason to believe that some at least of the clustered huts were occupied in Romano-British times, and equal cause to believe that others belong to a later age. Probably the type continued in use for many

centuries, and it may be taken as certain that such clusters, once built, would rarely be without occupants.

Many of the hill-forts of Cornwall, especially in the south-western extremity of the peninsula, are merely enlarged examples of the plan seen at Chysoyster, Bosullow, &c. Thus Chûn Castle,¹ crowning a hill of

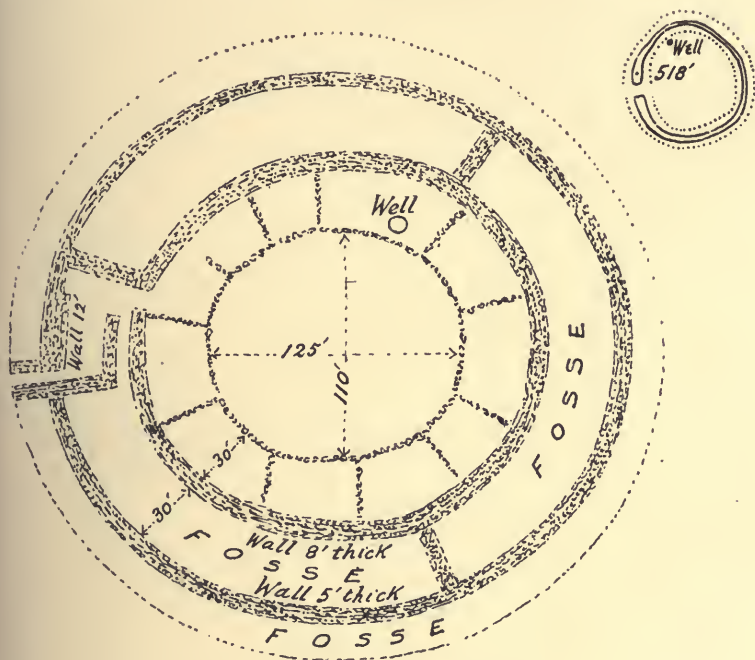


FIG. 86.—CHÛN CASTLE.

709 feet, although now greatly ruined, originally consisted (Fig. 86) of two concentric walls of dry-built masonry

¹ The illustration is after Borlase. In the inset is the same work as represented on the 25-inch O.M., which will show how terribly the ruins have suffered during the last century. Borlase mistook the remains of the huts surrounding the area for those of enclosures as shown in his plan, and his figure is absurdly regular; but nevertheless he probably obtained a true notion of the general arrangement and correct measurements of the walls and fosses.

with a single entrance towards the west. The outer wall, surrounded by a fosse 19 feet wide, was but 5 feet in thickness, but as much as 10 feet high in places. It was separated by an intervallum of 30 feet from the inner wall, which was 13·6 inches in thickness and about 5 feet in height, enclosing an area of about 60 yards in diameter. The central part of the inner area seems to have been clear of any traces of huts, but the ruins of bee-hive dwellings were traceable round the entire circuit of the wall. They averaged 18—20 feet in diameter, but one was as large as 30 by 26 feet. The entrance showed a peculiar plan, and the corresponding opening in the outer wall was not immediately opposite, but somewhat to the left. Traces of transverse walls could be made out in the intervallum, very similar to those observed at Crellâs, Bodennar. There was a well within the area.

The fortress of Castell-an-Dinas (Fig. 87) shows much the same plan, with the addition of a third wall, and apparently a vallum of earth and stone surrounding the whole. The width of the third wall is said to have been 5 feet, of the second 13 feet, while the third and innermost was much slighter than the second. The innermost wall enclosed an area of 190 feet in diameter, the intervallum between it and the second wall being about 30 yards. Within the area is a well, and on the westward slope of the hill another.¹ The steps leading to the latter are still to be seen. Close to the very centre of the fortress stood an isolated bee-hive hut, now obliterated by the erection of a particularly foolish "folly" on the spot. All round the inner wall had once stood other huts arranged

¹ Some two miles E.S.E. of St. Columb Major is another Castell-an-Dinas, a contour fort of 6 acres, encircling with three concentric rings of earth and stone the summit of a conical hill. Here, too, there are said to be traces of a well and of a tank for rain water, there being at the present time no spring on the hill.

as at Chûn Castle.¹ There are similar hill-castles on Tregonan near Helston (the inner wall 15 feet in height), on Trencrom near St. Erth, and at Caer Bran and Bartine Hill, beyond Sancreed.

The facts that fortresses of precisely this type are

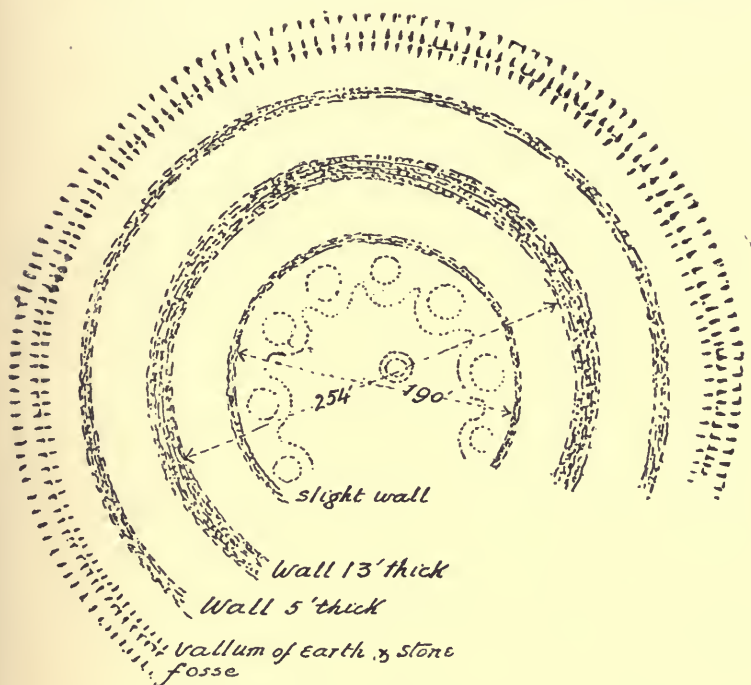


FIG. 87.—CASTELL-AN-DINAS.

abundant in some parts of Ireland, and that the English examples are most numerous in the parts of Cornwall into which Irish settlers are known to have made their way, go to support the theory that the type is of Irish origin. It has been identified with the *dun* of the Irish kings, and

¹ Illustration after W. Cotton in *Archæologia*. His figure is, of course, much too geometrical in drawing, but the real plan and measurements of the ruins were far more readily determinable in his day than they now are.

old Irish laws are cited which declare, not only that every king must have his own *dun*, but that every *dun* must have two walls and a moat, *i.e.*, a ditch. The further theory that *all* dry-built fortresses are of Irish origin, or imitations of Irish works, can scarcely be justified; stone forts would be built wherever stone was more easily used than earth, and there is no reason at all to suppose that such works as Worlebury and Dolebury owe anything to any Irish influence; nor is it to be supposed that all the stone forts of Scotland and of Wales, and they are multitudinous, were due to the same influence, although it may be true enough of some of them in those particular areas of Wales and Scotland which received settlers from Ireland. The Celts of Gaul built stone forts, and their kinsmen of south-eastern England only did not do so because they did not require such strongholds or because suitable stone was scarce. Pushed westward presently by the Romans, they found stone in plenty in the western and northern hills, and resumed there the practice of constructing stone forts, *caers*, *cathairs*, and *castells* on the hills. There is reason to believe that most of such forts are of comparatively late date, not older than the date of Cæsar's coming. There may be exceptions: where earthworks are concerned, the exceptions are usually more numerous than the rule. But even if there were no evidence at all to work upon, it were better to underdate than to overdate them.¹

¹ A fortress of this class was lately excavated at Dunbuie, near Dumbarton, and the character of the "finds" there discovered is still matter of debate amongst archaeologists. The fort was remarkable for its small size and for the extraordinary thickness of its wall, for there was but one—a solid, dry-built wall $13\frac{1}{2}$ feet thick, surrounding an almost exactly circular area of 30 feet diameter only. The single entrance, 3 feet 2 inches wide, was provided with guard-rooms on right and left, built into the mass of the wall. There was no trace of other huts. Hearths and cooking-stones were found, but no sign of pottery or of metal. But the most puzzling feature was the character of the ornamentation of the weapons and implements, which were mostly of bone or of slate; they are elaborately decorated with lines, circles, and cup-markings in a style unknown elsewhere in Britain, and alleged to be pre-

In some parts of Scotland, especially in the more remote northern counties, the Celtic population of historical times developed a peculiar type of stronghold known as *duns*, *brochs*, or Picts' Towers.¹ These are perfectly circular shell-keeps of dry-built stone, open to the sky, with a diameter in one instance of as much as 70 feet, and in the best-preserved example—Broch of Mousa, Shetland—a height of 40 feet.² Built with a pronounced external "batter," and with no opening save a single small door to break the flat exterior surface, they resemble nothing so much as the ruined trunks of gigantic windmills. The walls, averaging 13 feet in thickness, are solid to a height of 8 or 9 feet, except that occasionally there occur in the body of the wall, at ground-level, beehive chambers precisely like those at Chysoyster, and similarly approached from the inner area. The upper portion of the wall is always double, and is divided by floors of flag-stones into a series of galleries running entirely round the well of the tower, and approached by a single stairway which ascends from floor to floor. Light is obtained from windows opening upon the court. The Broch of Mousa has six such galleries, and may originally have had more, for in this, as in all other examples, the upper part has fallen to ruin. The single doorway is but $2\frac{1}{2}$ —3 feet wide. It was closed by doors of timber secured by bars, and furnished with guard-houses on one or both sides. In many examples there is very careful provision for drainage, and while in some cases there is a well within the area, in others

Celtic. Whatever be the ultimate verdict upon these finds, the fortress itself can scarcely be anything but an ancient work. For a discussion of the matter see Dr. Munro's *Archeology and False Antiquities*.

¹ The Scottish and Irish *dun* is the Cornish *din*, the Welsh *dinas*. *Broch* is the same as the Saxon *burgh*, *burh*, "fortress." Their attribution to the Picts may, perhaps, be correct only so far as the Picts were a Celtic (Brythonic) people, though immigrant into Britain before the Goidels.

² When perfect they may have stood as much as 60 feet high, or even more.

the water supply lies outside, approached by covered passages. Occasionally the approach is covered by out-works in the shape of fosses and ramparts. Exploration has shown that these constructions, which are mostly confined to the north and west coasts of Scotland and to the adjacent isles, mainly belong to the post-Roman period (VI—X centuries),¹ and were the work of a highly-developed agricultural people, familiar with the use of iron, and gifted with a decided artistic sense. They were probably erected as towers of refuge against pirates, and especially the Northmen. It is recorded that the Broch of Mousa successfully stood a siege by the redoubtable Earl Harold of Orkney as late as 1155.²

The "Round Towers" of Ireland—there are also three in Scotland, including a fine example at Brechin, 86 feet in height—have no relation to the Picts' Towers. They are mortar-built structures of great height—that of Ardmore is 95 feet high—intended to serve the double purpose of watch-towers and of storehouses for the treasures of the church or monastery close to which they were invariably built; and they are known to be works of the IX—XII centuries, perhaps modelled upon similar constructions in Switzerland (Canton of St. Gall), Italy (Ravenna), and elsewhere.³ Their Irish name, *Cloichtheach*,

¹ Some of them may be earlier, and some of the relics found on such sites belong to no recognized culture of the British Isles. But just as it is not wise to date any work by the *latest* relics found within its area, so is it unwise to date it by the earliest.

² See *Archæologia Scotica*, vol. v. There are more than 200 such brochs, or sites of brochs, in Sutherland, Caithness, and the Orkneys and Shetlands alone; there are many in Ross, Inverness, and Argyle; others in less numbers in the shires of Forfar, Perth, and Stirling; and the type occurs even as far south as Berwickshire. The best-preserved are the Broch of Mousa (Shetland) and the *duns* of Dornadilla (Sutherland) and Carloway (Lewis). Almost all stand at low levels, most commonly on the actual shores of lochs, or on islands lying close off shore.

³ Good Irishmen persist in believing them to be at least 2,000 years old. These figures are, to the rustic, only a manner of speaking. The writer has heard an Englishman, pointing to the old mill at Guy's Cliff, Warwick, declare that it was "Saxon, at least 3,000 years old."

signifies "bell-towers." There are 120 in Ireland. That at Clondalkin, only five miles from Dublin, is one of the best examples.

In districts where suitable stone was not to be found, *e.g.*, upon the chalk or sand, the hut was usually made simply by sinking a circular pit and covering this with a roof of boughs, turves, &c., what was lacking in height being compensated by the extra depth of the pit. As such boughs, together with their covering of turf, heather, rushes, skins, or what not, would quickly disappear, there remain on the surface no visible traces, except where the pit itself, usually all but filled up by the accumulated soil of years, is still discernible.¹ But covered as they invariably are with turf, or more often than not concealed by heath and other dense overgrowth, a quick eye is required to detect such pits at all, and as extreme a caution in attributing to them either date or purpose without the evidence of excavation. The finding of flint chips in any quantity, or the presence of ashes indicative of ancient hearths, may be taken as fairly good evidence of their true character, and this is as much evidence as is usually forthcoming without laborious digging. But such pits are by no means all of great age, and if the rash speculator would avoid falling into his own pit, an acquaintance with the geology of the locality is a primary necessity. The abortive or abandoned diggings made in the search for flints,² building-stone, chalk, gravel, and

¹ It is implied in Cæsar's account of his expeditions into south-east Britain that the buildings of the natives were easily destructible by fire. He nowhere says anything to suggest that stone was employed. So Diod. Siculus (v. 21), *τὰς οἰκήσεις εὐτελείς ἔχουσιν, ἐκ τῶν καλάμων ἢ ξύλων τὸ πλείστον συγκεκλιμένας*, "such dwellings as they have are makeshift erections of straw or wood." So Strabo (§ 197) describes the huts of the Belgic Gauls as "constructed of planks and wickerwork."

² It must be remembered that flint, like gravel, is still a valuable earth-product, extensively used for purposes of building and road-making. Old saw-pits (recognizable by their oval or oblong shape) are commonly found in or near camps in wooded areas, and not seldom pass for primitive dwellings.

mineral ores may all leave traces closely resembling those of genuine pit-dwellings; and though such diggings may themselves be of prehistoric date, they are on the other hand very frequently only the work of yesterday. Within the last century the miners of the Mendips built for themselves both furnaces and huts, of which the situation, the plan, the rudely coursed pitching, and the general appearance in decay, all resemble most closely the huts of the prehistoric age. An exactly similar method was until lately frequently used in making water-holes, which in consequence become known as Roman wells or as hut-circles, according to the imagination of the tyro.

In Norfolk, where stone was so scarce that the mediæval builders built even their church-towers of flint alone, and therefore of a round pattern, there are an extraordinary number of pits. At Weybourne, on the north coast, four miles west of Sheringham, are hundreds of them on the high ground overlooking a strong spring. All seem to have been made according to one plan. A circle of stones, from 6 to 20 feet in diameter, was first formed, and the soil within was then removed to a depth of from 2 to 6 feet, and banked up on the outer side of the circle. In some cases the floors seem to have been rudely paved. Nothing remains to show of what materials the roofs were built, but doubtless of boughs, turves, and rushes.¹ There are groups of similar pits on Beeston Heath, west of Runton, locally termed the "hills and holes"; others to the south of the curious little camp at Runton; and yet others further away on Marsham Heath, two miles south of Aylsham; while on Aylmerton Heath, where they go by the name of the "Shrieking Pits," they number more than two thousand. Local tradition oddly attributes

¹ The Belgic huts were "dome-shaped"—*i.e.*, of the bee-hive form—"with very thick roofs," says Strabo (§ 197). This implies that they were not roofed with either stone or shingles. In some cases (*e.g.*, at Saddlescombe, in the South Downs) the roof is thought to have been of clay.

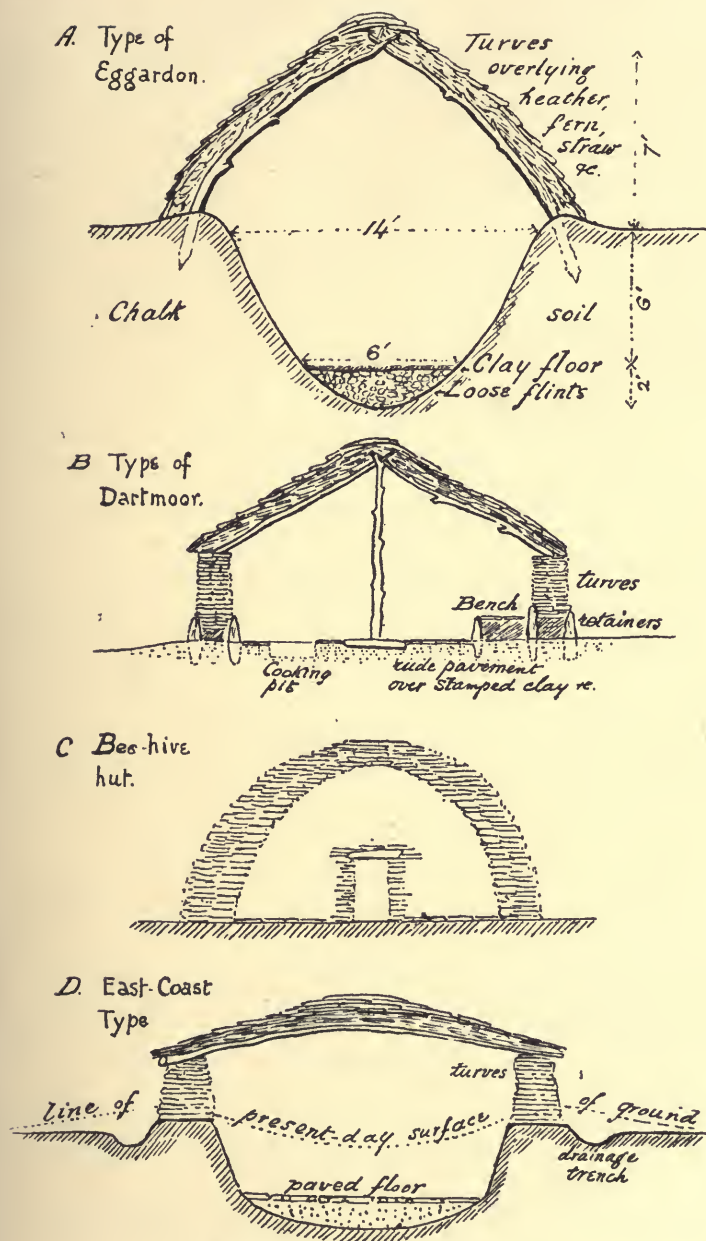


FIG. 88.—SECTIONS OF HUTS.

them to the days of Thomas Cromwell and the Peasant Rising. On Hayes Common, in Kent, is another well-known site, extending east and west of the village of Hayes over a distance of one and a half miles. "The enclosures, entrenchments, pit-villages, and tumuli are the finest in Kent for their extent, preservation, and the great number of pit-dwellings, exceeding 150. In fact, they cannot probably be matched nearer than Wiltshire or Dorsetshire."¹

Dwellings of this type, if they were to be habitable at all, must of necessity be built upon dry sites; and as a matter of fact, whenever they lie at low levels, it is usually upon sandy or gravelly soils. A curious exception is recorded on Sutton Common, near Askern, Yorks., in the marshy levels bordering the Don. Here, amongst other less determinable works, is a complete enclosure of 800 feet in length from north to south, and in width tapering from 400 feet at the north to 200 feet at the southern end. Its defences consist of one wide vallum with exterior fosse, carried entirely round the area; a second similar line of works upon the north and east; and at the north-east corner yet a third vallum placed as a breastwork to the outer ditch.² The whole of the

¹ W. M. Flinders Petrie in *Arch. Cantiana*, vol. xiii., p. 12.

² Absurdly described as a Roman work by Rev. Scott F. Surtees, *A Roman Camp in South Yorkshire* (1868). Its water-logged situation alone is sufficient to controvert any such theory of its origin. There were traceable, in a right line leading to the western entrance, the stumps of old logs, which, it is suggested, represent the remains of a causeway. In Cusworth Wood, on the adjacent higher ground, were a number of other pit-dwellings, arranged in rows and pitched with stone inside. These were about 4 feet deep. Describing the original appearance of these British huts, the writer goes on to say: "I could point you out a charcoal-burner's hut in the woods close by, of the same pattern and build and material, no doubt, as those of older days." In *The Evolution of the English House* (S. O. Addy) are given some particulars of the building of such modern survivals of the *cutian'r Gwyddelod*, with an illustration (also a Yorkshire specimen). Something much the same, but less carefully built, is still affected by the half-gipsy

surrounding ground is wet and swampy, and the actual area of the camp scarcely less so. This must be the explanation of the position of the dwelling-pits, indifferently round and oval, which are set at irregular intervals actually on the broad inner vallum, to the number of thirty or more. The spot must have been the refuge of fugitives driven from the more habitable dry ground above the marshes, and compelled to make what shift they might in the way of dwellings.

Besides the pits intended to serve as dwellings, the prehistoric peoples constructed others of varying shape and size and depth to serve as storehouses; and other pits were made for the reception of rubbish, for water-holes, or even for interments. In the great fortress of Worlebury are scores of pits, seemingly of the Iron Age, not more than 6 feet across and not so deep. In one of them was found a quantity of grain. In another in Oxfordshire was found a large store of lime. Within Highdown Camp, Sussex, was found a large rectangular pit excavated in the chalk, with steps at either end, probably likewise intended as a store-chamber, and apparently of the Bronze Age. At Fisherton, near Salisbury, was found a group of curious underground pits of conical section, the entrance being by narrow, sloping shafts which expanded below into circular chambers from 7 to 10 feet in diameter. These seem to have been constructed in the Stone Age. In Kent and Dorsetshire have been found other pits of that age but of the ordinary "hut-circle" type. It appears, therefore, that, wherever there was no stone available, pits of more or less similar kinds were constructed by peoples of the Stone, the Bronze, and the Iron Ages indifferently.

"Botchers" of the Buckinghamshire beech-woods. Does this dialect-word preserve an echo of A.-S. *boc*, "beech"?

Constructed on a more extensive scale *souterrains* of the Fisherton type are known as dane-pits or dene-holes.¹ There are, or have been, dene-holes in other localities (*e.g.*, near Dunstable and Chipping Norton, and in the vicinity of Bexley, Crayford, and Chislehurst) but the best-known examples are those of Essex, where in Hangman's Wood alone (at Little Thurrock, one mile from Grays) there are said to be as many as seventy-two. Explored some years ago, they were found to be of fairly uniform dimensions and plan: a central shaft is sunk straight down into the chalk here at a considerable depth, expanding at 60 feet or more below the surface into a spacious chamber varying from 16 to 22 feet in height. From this central chamber open out others, as if from a central hall, but with no attempt at regularity of plan; in some cases the process of making a second dene-hole close by has broken through the chalk wall of another, the two thus forming one complicated cluster of chambers. Their construction shows a highly developed knowledge of the art of mining, for the floors are in many cases nearly 100 feet below the surface, and in the case of those in Hangman's Wood, some 50 feet of loose soil, clay, and Thanet sand had to be pierced before the solid chalk was reached. In some instances there are discoverable what seem to be the traces of a lining to the shaft.²

Not to mention half-a-dozen less likely theories as to the purpose of these excavations, it need only be said that some authorities believe they were made in the search for

¹ Another name is Cunobelin's Gold Mines. About Rheims the wine-growers store their champagnes in similar denes, which are numerous there. They are probably of much the same age as the English examples, and, like those, they go down some 80 feet vertically.

² One of these, a deep dene-hole in Joyden's Wood, Bexley, Kent, is sunk within the area of what seems to be an earthwork of Roman character, lying upon the line of a British trackway.

flint, others that they were the granaries of a people of the Late-Celtic age.¹ The Chislehurst caves, in particular, have long enjoyed a blood-curdling notoriety as the scene of "Druidical" rites, and all kinds of fancy names have been given to different parts of them—"treasure-chambers," "altars," "ambulatories," and so on. Saner investigation may be said to have established the fact that these particular caves are of a very recent origin indeed, and were made simply in the process of digging out the chalk. Some dene-holes may be much older, even of Late-Celtic date, but most of them are indubitably modern;² and, whatever their date, the purpose of their making was probably always the same.

¹ Diodorus Siculus is constantly quoted as authority for the assertion that the Britons stored their grain in underground pits. What he does say (v. 21) is that they reaped the ears only, and stored them in roofed buildings (τοὺς σπράγους ἀποτέμνοντες καὶ θησαυρίζοντες εἰς τὰς καταστέγους οἰκήσεις). Pytheas of Marseilles is quoted also as saying that they garnered the ears and burnt the straw. This was the common method followed in classical Italy, and Varro says that the harvest thus gathered might be stored for fifty years without detriment, provided due precautions were taken against damp. The custom of storing grain in pits prevailed in countries as different as Spain and Cappadocia, Thrace and N. Africa (Smith's *Classical Dict.*, vol. i., p. 64b). But Diodorus goes on to add that the Britons were said to take out of their granaries for daily use the oldest portion of the contents. How they could do this if the grain were merely dumped into a deep pit is not apparent; it might, of course, be done if each new harvest were stored in a separate chamber of a dene-hole, but not possibly be managed with such a simple shaft as, e.g., those found at Cadbury (p. 283) and Mount Caburn (p. 284). Yet both these shafts have been imagined to be Celtic grain-pits. Unthreshed grain would probably keep much better above ground, and the words of Diodorus may very well refer to such airy buildings as those mentioned above, p. 227, note.

² There are men still alive who worked in the Chislehurst "caves" some sixty years ago. One feature of these is the presence of a well within the workings. The writer has talked with a person who harboured no romantic notions about Druidical water-supply. The well was built, he said, by Mr. So-and-So (he knew the man and his residence) "in the sixties. *He was a curious sort of man,*" he added. "*He wanted plenty of good water.*" The shafts, which are mistaken for the sole means of entrance to the supposed underground dwellings, were, he explained, made for hauling up the chalk from the mine.

Compared with these, the "earth-houses"¹ of Scotland are very primitive contrivances. They are narrow, horizontal shafts, sometimes 60 feet long, sunk beneath the surface, dry-walled with unhewn stone, and roofed with flags. In the more spacious specimens, the successive courses of the side walls are gradually brought together in bee-hive fashion, until the whole can be covered in with large flags. The shaft is sometimes chambered, but not often. Covered with earth, the whole made a very effective cellar or grain-pit, although it was so near the surface that a modern plough generally breaks into it. The evidence of the remains discovered in them shows them to be post-Roman, and in some cases at least to have served as hiding-places at a very late period; in fact, underground chambers of smaller size were still made and used for that purpose in the remoter western islands as recently as the beginning of the eighteenth century.

Nothing about the dene-holes is earlier than the Late-Celtic time, and very often it is nothing like so early; the Fisherton Pits belong to the Neolithic Age; but older than either are the flint-diggings of Cissbury and Brandon. Flint "knapping" is still the staple industry of Brandon, and it seems to have flourished on the same spot during an unbroken series of centuries since the Neolithic Age. Six miles north of Brandon, on high ground near Weeting, is a series of pits of various depths and sizes known locally as Grime's Graves. The locality had long been known to abound in beautifully worked flint implements, and the

¹ Also called yird- or erde-houses, with the same meaning, and Picts' houses. They are common in many localities, sometimes occurring in groups of some size, *e.g.*, on Clova Moor, Aberdeenshire, where there are more than forty together. The Cornish *fougous* (*e.g.*, the Fougou of Trewoofe) are similar, but some of these latter are the work of very recent smugglers. The writer has talked with an old North-Devon man, who proudly boasted that his grandfather was the best smuggler on all that coast, and declared that he alone possessed the secret of certain caves—*fougou* is only the Brythonic *ogof*, "cave"—in which the smuggled goods were concealed amongst the Exmoor hills. He refused to divulge his secret.

explanation was forthcoming when some of the pits were explored. They proved to be the mouths, now choked with rubbish, of shafts sunk into the chalk in search of flint. One of them was carried down for 80 feet, with lateral galleries wherever a workable belt of flint was found.¹ The width of the main shaft, which had first to pass through several feet of loose and sandy soil, was sometimes as much as 28 feet, and the side galleries were $3\frac{1}{2}$ feet high. Within them were found some of the miners' appliances—stone implements, a deer's horn which had been used as a pick, and small chalk cressets for lighting purposes. These relics showed the mines to date from the early part of the Neolithic Age, yet man had already learnt, not only that freshly-dug flint is more tractable than that which has been weathered by exposure on the surface, but also that certain kinds of dug flints were more suitable for his purpose than were others. The great 70-foot pits of Cissbury (Fig. 214), explored on several occasions, tell the same tale of a neolithic community permanently, and apparently peacefully, engaged in the flint-mining industry, and certainly gathering wealth therefrom, whether by trading the finished or unfinished implements, or both. There are other places in England where flint was mined and worked in very earliest times, but no other centres seem to have afforded a stone so much valued as those of Cissbury and of Brandon, and, so far as is known, no other mining settlement reached to the prosperity indicated by the immense area, the extensive workings, and the huge fortifications of Cissbury.²

From a very remote age, therefore, neolithic man knew enough about mining to satisfy all his modest requirements in the way of dwelling-places and store-

¹ The flint nodules lie in parallel bands in the chalk. Not all chalk produces flint of the same quality, and the bands vary in thickness and in frequency. The crumbling of the cliffs at Seaford, Sussex, has exposed a fine section of flint-bearing chalk, just under the British camp.

² For a description of this camp, see p. 647.

houses. According to the character of the soil on the particular spot, his huts would be built above the surface or sunk beneath it, their height and depth and size varying with the differences of culture, wealth, and experience.¹ But when one looks for the traces of habitations of any kind within or about camps, they are not by any means always apparent. In stony districts they are easily detected, unless agriculture has removed them, the more easily as the surface of the ground in or about such constructions, as, *e.g.*, Grim's Pound, was usually pretty well cleared of loose stone, to be used in building walls and huts. In the south-western counties, therefore, in Wales, and in the hills north of the Craven district, there is usually evidence enough, and many of the Scottish hill-forts show such traces in profusion. But in other localities, where the conditions would seem to have been equally favourable, there are few or no remains of huts, *e.g.*, on the Mendips, in or near such fine works as Dolebury, Maesbury and Blacker's Hill, and on Exmoor. At lower levels generally, and everywhere where stone is scarce, the plough and the builder have between them obliterated almost every trace, and only those have escaped which were sunk to great depths, like the dene-holes and the pits at Fisherton, or which by a lucky accident stood upon lands never enclosed or ploughed, like those of the Commons of Kent and Norfolk. Even on the Chalk Downs they had little chance to survive, for as there was no building-stone they must have been simply and literally pits² with

¹ Speaking generally, man's progression has been upwards, even in the matter of his dwelling-places; and the older the hut, the deeper the pit. The total span of his progress might be measured by the distance which separates those who dwelt in the Fisherton pits from those who occupy the topmost floor in the latest American "sky-scraper."

² Similar circular depressions also mark the sites of the refuse-pits so frequent on Roman or Romano-British sites, *e.g.*, at Hod Hill. They differ from the true hut-pit in having a more funnel-shaped section, whereas the hut-builder was naturally concerned to have as wide and flat a floor space as might be.

coverings of boughs; and the wastage of years would rapidly fill up the pits, except where, as at Eggardon, they were of unusual depth. Moreover, there are few areas of the Downs which have not been ploughed over since the days of the hut-builders. It is therefore hardly matter of surprise that there should remain few visible traces of huts in all the formidable fortresses of Wiltshire and Dorsetshire. They once existed within Maiden Castle; they still remain at Eggardon, at Hod Hill,¹ at Chalbury, Martinsell, and Durrington walls; and it is reasonable to suppose that they once existed at or near other similar camps of those counties. Amongst the camps of the South Downs there are, or were, huts at Cissbury, Mount Caburn, The Trundle, and Hollingbury.² It can certainly

¹ For Hod Hill, see *Archæol. Journal*, vol. lix. (1900). The pits were of the usual type, varying in diameter from less than 6 to more than 9 feet, and in depth from $3\frac{1}{2}$ to $6\frac{1}{2}$ feet; and excavation has proved that they were occupied in Late-Celtic times. But two points of special interest were determined: firstly, that an original pit had in more than one instance been so completely abandoned as to be utilized for an interment, and again inhabited when the interment was forgotten; secondly, that in a number of cases two or three pits were enclosed within a circular bank and fosse of slight relief (Fig. 36), as it were, miniature replicas of the arrangement seen in the central citadel of Chûn Castle, etc.

² Pits are to be found at or near most of the South Down camps, e.g., Harrow Hill and Wolstonbury, but they are not necessarily dwelling-pits. Only exploration can decide whether they were really such, or rather flint-diggers' pits or similar excavations. Mr. H. S. Thoms has quite lately detected a number of hut-pits on Saddlescombe, Sussex, adjacent to the Devil's Dyke. They had clay floors and central hearths; and the latter fact shows that they can have had no central strut to the roof. It has been argued, from the small size of the pits at Mount Caburn, that these can never have been dwelling-places; while from the fact that traces of grain have been discovered in such small pits at Worlebury and elsewhere, the inference has been drawn that those at Caburn also were intended for store-pits. But these pits are not a whit more exiguous than many of the bee-hive huts of the south-west counties, which admittedly were dwelling-places. And if these pits represent only the store-houses of a people, where are the remains of that people's dwellings? For presumably they did not live at any distance from their belongings. Primitive man was the best judge of his own requirements, and he may have been quite as comfortable in a 4-foot pit as in those exiguous "mound-dwellings" of Wales and the North out of which the "Celtic imagination" has evolved the theory of a pygmy race.

never be argued that, where there are no discoverable traces of huts to-day, there never existed any. The case of Maiden Castle is in point: no vestiges of any dwellings were known there until they were abundantly revealed by accident in the digging of a pond. Judging from the analogy of the forts where huts are still traceable, and from the evidence of such few excavations as have been made, it is probable that all the hill-top fortresses were built to shelter permanent populations, and were not mere *asyla* to be occupied on emergency only. And it must not be forgotten that the huts of which we have remains were necessarily only those best calculated to survive. There may very well have been many, even a majority of the population, who never rose to the dignity of such elaborate dwellings, living rather in the rudest of shelters like those of gipsies, who leave behind them no other traces than the ashes of their camp-fires, and even these for but a few days or weeks. It is known that many of the huts were built of wattle and daub,¹ that is, of wicker plastered over with clay or covered with turves, and of such there could survive no trace except in the rarest instances. And lastly it is quite likely that, in the cases of certain of the larger camps, the population found shelter in the fosses as much as in the area, which was presumably given over to the cattle; but the fosses of camps have seldom been explored further than by running a trench across at one or two points to determine their original dimensions and the form of the original section. In several cases it has been proved that the fosse was the usual cooking-place of the occupants,² and it is quite likely that it was, where

¹ At Mount Caburn, Hod Hill, the Lake-Village by Glastonbury, and elsewhere.

² Notably at War Ditches, Cambridge, and at Wallington. In the former case the cooking-pots, too frail to stand fire, were set upon flat griddles of thin stone resting on four struts of burnt clay; and there were also found

large enough, the site of many of their dwellings, the more so as huts of slight construction must have been instantly knocked to pieces if built within the same area as that where the cattle were herded. It was to obviate this that the design seen at Winkelbury was introduced. But probably a majority of the population dwelt outside the area in shelters of the frailest kind. The only thing for which the early peoples had to fight was their live-stock. Their dwellings offered nothing at all in the way of loot, for the owners could and did carry with them whatever else was theirs—their pots, their implements of war and of industry, their wives and children—leaving to the raider nothing but heir pot-boilers.

The conditions of life when the hill-forts were occupied must have been very much like those which still obtained centuries later on the Border.² That unhappy debatable land, bristling with fortresses of British and Roman and Norman or mediæval dates, knew little peace until the Union; and as late as 1596 it was declared that there were estimated to have occurred there a thousand murders within the preceding nine years, and thefts to the value of £100,000—say half a million of modern money. The great families living on or near it regarded it as free warren, and so often as the lady of the house found her larder growing bare, she served up to her lord a dish containing only a pair of spurs; and he desiring no further hint, started forthwith upon another raid, burning what could be burned, slaying where resistance was offered, and carrying away “nowts” by the hundred to replenish his own byres. The only dwellings worthy of the name were the castles of the Douglasses, the Buccleuchs, Percies,

thick discs of the same clay intended to be slipped between the struts and the griddle to vary the distance between it and the flames. In Wallington camp the stone griddles were replaced by flat tiles of burnt clay pierced with irregular holes. See above, pp. 140–142.

² See an article by the late Bishop Creighton in *Archæol. Journal*, vol. xlii.

Howards, and Dacres, and the pele-towers¹ of Armstrongs, Kerrs, and Scotts, Graemes, Fenwicks, Liddles, Musgraves, and Featherstonhaughs—comfortless and gloomy buildings of massive masonry with rooms as dark and confined as cells, designed only to shelter refugees until the marauders, of whom they live in daily dread, should have passed on. Lesser folk had perforce to be content with nothing better than “earthen and wooden huts containing nothing worth attack,” and roofed with some material calculated to resist fire. Their food was meat and milk, barley, oats, and peasemeal. “They had neither bread nor wine.” They had no furniture and no utensils other than their weapons and their kail-pot. Their very beggary was the best safeguard of such dwellings: what the raiders sought and took was the scanty and miserable livestock.² Antedated by centuries the picture may serve very well for what prevailed even in Roman days upon the Welsh and Scottish borders, and at a still earlier date in many nearer parts of Britain.

A good deal has of late been written about the “cattle-ways” of the hill-forts,³ *i.e.*, the well-marked tracks upon

¹ *Pele*, *Pile*, and *Pale* are one and the same word. *Pele* meant first a stake (the Roman *vallus*); secondly, a palisade of stakes, a stockade, an enclosure defended by a palisaded wall (*vallum*); thirdly, a castle, and more particularly a small castle, or tower; and fourthly (sixteenth century), the pele-tower of the Border. Similarly, the wall and rampart of a pele was a pele-dyke. If there was a rampart there was a fosse; and by “pele-tower” one understands usually a “tower-built house” surrounded by fosse and vallum.

² Bishop Creighton, *l.c.* He cites the experiences of Aeneas Sylvius Piccolomini, an eye-witness, in 1435, who summed up the character of the land in the epithets, “uninhabitable, terrible, uncultivated.” Some of the details of the picture are filled in by Thos. Carrick in *The Borderland in the Olden Time*.

³ See *Neolithic Dewponds and Cattleways*. The instances there cited are particularly Cissbury (p. 647) and Figsbury (p. 574). The authors do not suggest any reason why similar tracks should not be equally prominent about any other considerable camp of the chalk-hills, but it is a fact that in many cases they are not discoverable at all, although the conditions appear to have been the same.

the hillsides about them, scored, it is suggested, by the feet of the cattle as they passed to and fro between the camp and their pasturage. It has been assumed that they must necessarily be of the same age as the camp, and the latter being assumed to be neolithic, the cattle-ways have been so styled likewise. Unfortunately there is very scanty evidence, if any, to prove the antiquity of such trackways, which are rapidly formed in certain soils and as rapidly assume all the appearance of age. Even if they were as old as is assumed, there is no showing that they are due to cattle only; and seeing that similar tracks lead from one British village to another on the Downs of Wiltshire and Dorset, it would appear that the ordinary intercourse of the times was enough to produce them.¹ But there is good reason to believe the trackways to be in many cases of quite recent formation, and it is more than likely that the camps have frequently been used as grazing-grounds since the turf covered them. Such a fortress as Cissbury, with its 60 acres of grass and high ramparts, offered a very convenient pasturage and fold in one to the farmers and flockmasters of any period; and had it been so used for but a few years only, the constant tread of a small herd of horned cattle was bound to wear tracks enough along their usual routes. The further assumption that because such tracks frequently lead to ponds wet or dry, these ponds are therefore of Neolithic Age, is quite unwarrantable, and can be shown to be untrue. It is not easy to see how even excavation could hope to establish very

¹ The Celts had carts, for instance, and also war-cars; and though it is not suggested that the latter caused the trackways about the hill-forts, it has been argued that there must have been roads in Scotland (and *a fortiori* in England) before the Roman time, because there were cars. Would it be argued further that, when the tribes went to war, they were careful to arrange for their battles to take place on ground such as we should think suitable for car-fighting? Unquestionably there were roads of a sort, but the car-drivers were independent of them. Cæsar tells us that they could handle their teams on steep hillsides with astonishing skill; and there are farmers on the Downs who can do so to this day.

definitely the age of a trackway: it is certainly not sufficiently well established to allow of their being made the premisses from which to draw conclusions about the ponds.¹

As a general rule, the lower the level the less the stone available for building. The huts built upon lower levels must therefore have been very easily destroyed, and it is precisely upon these levels that the plough has had the best and longest opportunities to efface them. They survive only where by good fortune some piece of common-land has escaped cultivation. Elsewhere they were speedily destroyed, and their sites are to be traced only by flint flakes and other leavings of their ancient occupants. Every collector of flints is aware of the extremely local character of the objects which he seeks: they abound on particular spots, perhaps at one corner of a particular field, while the surrounding soil will not yield a trace of human handiwork. Wherever such "prolific" spots occur must have once stood a neolithic settlement larger or smaller, and the limited area of such sites is exactly what was to be expected, for only in exceptional cases was the neolithic settlement of great extent. For every village covering an acre, there were probably twenty which did not cover half that space, and a hundred which boasted of but a dozen huts or so. If one were only sure that all such sites were contemporaneously occupied, it would be an easy matter to reconstruct the neolithic map of any district in which the flint-hunter has made exhaustive researches.

Down to a very late period portions of the populations of Scotland and Ireland continued to live a half amphibious life on crannogs,² *i.e.*, artificial islands formed near the

¹ See further on this matter of trackways, Ch. XVIII, and for the dewponds, Ch. VIII.

² The word is derived from Irish *crann*, "tree" or "log," and answers to the English "pile-dwelling" and "lake-dwelling." They are mentioned amongst fortified strongholds of the Scots as late as 1608—"Crannokis of the Yles."

shores of lakes and tidal estuaries. Not many have thus far been brought to light in England, but they were probably at one time numerous. Examples are known in Yorkshire (4) and Norfolk (1), with more dubious cases in Suffolk (1), Shropshire (1), and at Hedsor in Buckinghamshire; but the example *par excellence* in this country is the Lake-village at Meare, near Glastonbury.

This seems to have been constructed in the manner common to all crannogs. Stone, gravel, clay, brushwood, and logs were sunk in the bed of some shallow sheet of water, until there was formed a foundation¹ firm and dry enough to carry a hut or huts of wicker-work or timber. The rude floor was made of logs overlaid with clay, and slabs of flat stone furnished a central hearth. The gradual settling of the substructure under the weight of the whole rendered it necessary from time to time to lay a new and higher floor, and excavation reveals the traces of each successive floor, in some cases as many as ten. The remains found upon the Yorkshire sites point generally to a people still in the Bronze Age, whereas the settlement at Meare, though certainly pre-Roman, is as certainly of Late-Celtic date, and indicates a degree of culture and art rather surprising in a people who continued to occupy a site seemingly so undesirable. They were expert workers in metal and in carpentry: they enjoyed the benefits of a far-reaching commerce; and to judge from the number of separate dwellings—sixty-five—were numerous as well as prosperous. It was not the village of a people forced to adopt this way of life by circumstances, and therefore decadent, but progressive and apparently masters of their own destiny. The staple of their food-supply was in fishing and hunting, but they possessed also domestic

¹ The Abbeys of Westminster and Crowland, amongst others, were built upon foundations of exactly the same artificial character, the one in a Thames marsh, the other in the Fens.

animals,¹ which found pasturage upon the adjoining shores of the swamp or upon the patches of higher ground amongst the fen, which betray by their Saxon names that they were still islands in the Saxon time. The gradual shrinkage of the fen, whether by embankment or drainage, or the slow elevation of the land, covered the entire village with one uniform depth of peat; but the process of desiccation continuing, the softer and deeper peat surrounding the crannogs shrank and so left them as so many mounds just breaking the general level of the soil—obvious enough when once observed, but never noticed until 1893. The peat, moreover, having a peculiar power of preserving timber, the more perishable portion of the remains has escaped destruction—bowls of wood, boats hewn out of single logs, and the timber work of the dwellings. The entire area of the village was a rude oval measuring about 500 by 400 feet. It was entirely surrounded by a stockade of stout piles driven into the surrounding peat at irregular intervals. The only approach, save by boat, was along two narrow causeways, which stopped short at a distance of 12 or 14 feet from the actual crannog, leaving a waterway some 6 feet deep, which must have been crossed by a sort of bridge. Close to the stockade were found a number of skulls, all showing unmistakable signs of ill-usage. They were of the long-headed Iberian type, and from their condition and situation it is supposed that they were the trophies of war—skulls of some hostile tribe, affixed in the customary fashion to the gates of the victors' stronghold.²

¹ Amongst the other finds was a cart-wheel. Most of the huts were round, but there were a few of oblong shape, and the frame-work of some of these was carefully and accurately mortized together. An oaken door was found. Amongst articles of luxury may be mentioned elaborate glass-ware, a box of dice, and a cock's spur.

² The inhabitants of the great fortress of Worlebury were of the Iberian type, and it has been suggested that these skulls from Meare are the grim relics of some encounter between the Lake-dwellers and the men of Worle-

It is likely enough that other such settlements still await discovery in the wide area of the Somersetshire levels,¹ in the Fens of East Anglia and similar localities ; but it is obvious that sites of this class can offer but small resistance to the plough, and must disappear entirely when once the share has torn up their clay floorings and the flag-stones of the ancient hearths. What saved the village at Meare was the poverty of the soil that hid it : there is no ploughing the 20-foot peat of Somersetshire, for it will grow nothing but a poverty-stricken grass.

Scattered with some frequency over the Downs in Wiltshire and Dorset are the remains of village settlements of Roman, post-Roman, and even pre-Roman date. The most common characteristic of these is their complete lack of any regular plan : they are usually just such haphazard accretions of huts and enclosures as in later days grew up into English villages. In those cases where a more regular disposition of the huts in streets or lines is discoverable, the settlement appears to be of later date, betraying the influence of Roman ideals of method. Their sites are as a rule marked only by a tangle of seemingly purposeless banks and trenches of very low relief, from which even excavation can restore only conjecturally the probable position of hut and fence, roadway and containing ditches. The huts, which follow no regular design, were usually built of wattle-and-daub, and the fences dividing one small enclosure from another seem to have been either of the

bury. It is scarcely necessary to go so far afield : there was a very large Iberian element in the population of the south-west, and the men of Meare must have had many nearer neighbours than those of Worlebury, twenty miles across the fens. There is no reason, indeed, why the skulls should not be those of their own community. It was customary to make a trophy of the skull, not of the external foe only, but equally of the domestic offender. One of the skulls was that of a woman. Was she possibly the victim of exogamy, a bride stolen from some adjacent community ?

¹ Confirmation of this comes at the moment of going to press, in the discovery of a second lake-village in the immediate vicinity of Meare (July, 1908).

same materials or mere palisades of wood. The surrounding trenches are so slight that they cannot have served for defence so much as for drainage. Many of these villages have wells, sometimes several of them, and the trackways leading from one village to another are frequently quite



FIG. 89.—BRITISH VILLAGE, HAMPTON DOWN.

plainly traceable. There is a remarkable absence of all masonry even of the most primitive kind, and the rubbish-pits reveal a decidedly low standard of culture. The inference is that the rural population of Roman Britain was poor and backward, if numerous; that it was concerned mostly with cattle-farming and agriculture upon a small scale; and that it reaped from the presence of its conquerors little benefit beyond the guarantee of the *Pax*

Romana, which at least enabled it to dispense with the building of any defensive works worth the name. Apparently the same phenomena asserted themselves then as now: the more capable and energetic part of the native population gathered about the Roman towns, and thus began a "rural exodus," which was not arrested until the occupation of the island by the Saxon tribes. A curious feature of these villages is the frequent presence of a large circular enclosure at or near one of the entrances, *e.g.*, at Gussage Cow Down and at Turnworth, both in Dorset.

Between Marlborough and Amesbury are upwards of a dozen of these sites;¹ others at Heale Hill, Woodcuts (excavated by Pitt-Rivers), and near Eggardon Hill. They lie commonly upon the slopes of the Downs rather than on the hill-tops, and they have been preserved because the soil was too poor to be worth ploughing. In fatter soils they have almost all perished. A number have been found in the hills of the northern counties. The tourists of half a century have made their pilgrimage to a well known Yorkshire example on Danby Moor, near Whitby. "It is," so they are assured, "of late date, the pits which mark the sites of the huts being arranged in two roughly parallel rows, with an open street between. The external defences are of the slightest. At one end (west) is one of the peculiar circular enclosures already noticed, with a diameter of 35 feet, and a number of barrows and 'Druidical' stones lie immediately adjacent. The huts number upwards of forty, with an average depth of $1\frac{1}{2}$ feet, and diameters from 3 to 8 feet. The width of the street is 20 feet or so." As a matter of fact this is no village-site at all: the pits and mounds are merely the

¹ Speaking of Hewish Hill, the Rev. A. C. Smith writes: "Nowhere in the whole area of our map (N. Wilts.) are there such distinct traces of British habitation" (*Antiquities of North Wilts.*).

chance remains of early mineries, and similar remains, whether styled villages or not, are to be found all over the Cleveland district.¹ Probably there are many genuine settlements still to be found in Yorkshire, Cumberland, Westmorland and Northumberland,² but the deep growth of heather on the moors makes it a rather hopeless task to seek them, especially where mining operations and peat-digging have broken the ground. Nevertheless, it is certain that wherever camps and barrows of the British types are to be found there was a resident population, which must have had its dwellings and settlements, and the discoveries made from year to year are proof that there are still many more to make.

Examples are known of native villages which reveal a more orderly arrangement and a somewhat higher regard for creature-comfort. At Welton, for example, in Staffordshire, the huts, paved with rude stone, were arranged as a regular street. But there seems to be nothing to traverse the general statement that the Roman conquest proved decidedly detrimental to the development, even to the continuance, of that peculiar art and culture which marks the Late-Celtic period. There seems to have occurred a change analogous to that which has so constantly followed the intrusion of the white races into native areas in both hemispheres—such a change as has already debased much of the native art of India and is at the present moment destroying that of Japan. It would perhaps be less correct to say that the British Celts became Romanized than that they became denationalized.

¹ See Rev. J. C. Atkinson, *Forty Years in a Moorland Parish*, p. 61 *sqq.* These miners' pits are easily recognized by any one with a slight knowledge of local geology, for they invariably lie upon spots where is, or was, an out-crop of ore, usually iron-ore.

² Mr. J. Clifton Ward has compiled a list of twenty-one such prehistoric sites in Cumberland alone.

CHAPTER VIII

DEWPONDS

*"We have no waters to delight
Our broad and brookless vales—
Only the dewpond on the height
Unfed, that never fails."*

THE fact that so large a number of camps appears to be totally lacking in any water supply has provoked much obvious comment and a great deal of less obvious theorizing. In the case of the hill-systems of the rest of England the difficulty frequently disappears, for as anyone knows who has walked across them, the highest levels of the moors and hills of the northern and western counties never lack abundant springs, and when the climate was wetter than now it is the springs likewise must have run more copiously. It may safely be said that the occupants of no camp in Northumbria, Wales, Exmoor, Dartmoor, or Cornwall had far to go for water, and in very many instances springs rise actually within the camp, or even flow across it.¹ But in southern England, that is to say,

¹ Many of the Cornish hill-forts have wells within the area. Streams flow through the small camp on Hawsett Moor (Fig. 34) and the larger Wanlud's Bank, Bedfordshire. Within the lines of the great fortress of Old Oswestry (Fig. 17) is a series of large pits on the western side. These are commonly supposed to have been intended for the storage of water, and some of them are still wet. Their date is a matter of question, but from their position they would seem to have been planned at the same time as the defences of the camp.

on the chalk hills, the case is otherwise. Here the springs are at the present day remarkably few. Such springs as there are lie at the foot-hills, and, save for artificial reservoirs, the upper levels of the Downs in Wilts, Dorset, and Sussex are almost entirely waterless.

Pitt-Rivers made a special point of discovering, if possible, from what source the occupants of the camps which he examined could have obtained water, but with very little success. In regard to the camps of Sussex, he declares¹ that he had "not met with a single example of a fort having a supply of water within the enclosure, and the majority, like Cissbury, are at a considerable distance from any spring."

In Wilts and Dorsetshire he found the same difficulty. Warne, expressly remarking² that the earthwork at Dunciff, between Shaftesbury and Sherborne, possessed an ever-flowing spring, insists on its exceptional good fortune. At Pillesdon Pen he fancied he observed "ancient reservoirs fed by natural springs" in two large quadrangular hollows at the north-western end of the camp, remarking again that "absence of water was the only weak point in the military works of the Durotriges." He elsewhere quotes Aubrey for the assertion that there was a spring within Badbury Rings, and the same assertion is made of Maiden Castle, Dorchester. Neither of these alleged springs is now visible.³

Half a dozen theories, more or less probable, have been mooted in explanation of the difficulty. It has been suggested, for example, that the springs of the Downs once flowed at levels far higher than at present. Pitt-Rivers noticed in the case of Winkelbury that a spring near the camp only runs in wet seasons; and he gives the

¹ *Archæologia*, xlii. (1869).

² *Ancient Dorset*, p. 49.

³ Within the woods known as the Earldoms, 3 miles east of Downton, Wilts, but at no great elevation, is a ring-work surrounding a copious spring.

authority of a local well-digger for the assertion that a spate in the Adur affects the level of water in wells several hundred feet higher up on the Sussex Downs.¹ Both these facts tend to support the theory, but against it is to be set the fact that there are few indications upon the Downs of old water-courses, although in the chalk soil even a small stream must have speedily cut a very noticeable channel. Another suggestion is that the camp-builders took their supply from wells, and any pit within the area has been supposed to be the mouth of such a well. But excavation has in many cases shown that such pits are not wells, and although it has further proved that even the earlier occupants of, *e.g.*, Cissbury could and did sink mine-shafts upwards of a hundred feet in depth, there is no reason to believe that they ever attempted shafts of the depth necessary to reach water at these elevations—to a depth, that is, of some 300 feet.² Yet a third set of theorists, compelled to admit there was no evidence of any supply within the camp, have seen in the various deeply-worn trackways leading therefrom so many “covered ways” intentionally constructed to secure access to some spring more or less remote. Thus, at Cissbury, it has been alleged that such a “covered way” was constructed the whole distance to Aplesham, fully 3 miles; and even Pitt-Rivers was forced to conclude that the supply was brought from Broadwater, $1\frac{1}{2}$ miles away, the well at Leechpool, 1 mile to the east, being thought to be of later (Roman) construction. Other theorists, giving the

¹ Until a few years ago springs used regularly to break out at various points along the 100-foot line under the Downs overlooking the Ouse Valley near Lewes. Some of these occasionally run still, but many of them have not flowed for several years—another proof of the steady fall of the water-levels.

² At the present time the wells upon some of the Down farms go down 350 feet and more. At Lee Farm, under Harrow Hill, is, or used to be, a well worked by a tread-wheel, on the principle of the well-known donkey-wheel at Carisbrooke, the farm lads taking the donkey's place, doubtless quite efficiently. There are other such wells at Patcham and at Saddlescombe.

problem up, have simply maintained that such camps were never intended for occupation save on the occasion of a sudden raid—that they were merely camps of refuge. But admitting that this may be true of some, it is certainly not true of all. Cissbury itself is supposed to have had a permanent population of flint-knappers, possibly even before the great ramparts were thrown up; so the theorists are reduced to the supposition that this population must have come to work in the morning and gone home elsewhere in the evening, carrying with it a sufficient supply of fluid for the day's requirements, precisely as do the navvies of to-day. It may be added that Pitt-Rivers, having discovered upon one site in Wilts the skeletons of persons who had apparently suffered acutely from rheumatoid arthritis, suggested that these victims of the disease had contracted it through long fetching and carrying of water to their camp! Anyone who knows how damp is the atmosphere of a high hill-top will doubt whether it is needful to seek so far for the explanation.

The theory that the camps depended upon ponds now dried up, a theory several times mooted only to be dropped again, has lately been revived by various speculators,¹ who believe the so-called dewponds still found upon the Downs to be merely a survival of the actual means of supply in use among Neolithic men; and going still further, they assert that Neolithic man built his ponds according to the same elaborate method now practised by the pond-makers of Wilts and elsewhere.

¹ See especially Messrs. A. J. and G. Hubbard, *Neolithic Dewponds and Cattleways* (1905). Twenty-five years earlier a similar view was advanced by Sir George Duckett in *Wiltshire Arch. and Nat. Hist. Magazine*, vol. xviii., p. 177 (1879), who went so far as to suggest that all the pits to be seen in the camps of Cissbury and Mt. Caburn were intended to hold water, and even thought that the ditches of British camps on the chalk might have been puddled to serve as reservoirs! Another writer (Mr. T. Shore) has advocated the pond-theory for the Hampshire camps, but without offering any proof of the antiquity of the ponds now found in many of those camps.

They cite two or three instances of camps in or near which such ponds are found, pointing out that the ponds may in some cases conceivably have some structural connection with the camp, and that in other cases there are trackways leading from the camp to the pond. Upon this evidence—mainly drawn from existing facts at Cissbury, Chanctonbury, Maiden Castle, and Figsbury Ring—has been based a theory which is held to solve the problem of a century, and to cover all and every camp to which the problem applies. What is the value of the evidence will appear later.

Ponds on the high chalk-downs are of two kinds; some are artificial and others are natural, but both kinds are fed almost entirely by dew, fog, and mist.¹ With natural dewponds man has no concern; they are mere water-holes, large or small, scattered about the uplands, sometimes in the open, sometimes amongst dense woods, but invariably affording a supply of water even in the hottest months of the hottest summer. They are only to be found where there occur pockets of more or less clayey soil overlying the chalk, for the latter in its natural state is usually too porous to retain water. Such deposits of clay, of varying extent, are common upon the Downs; clay mixed with sand or gravel forms the surface-soil over large areas, and it occurs occasionally as a capping to the highest summits, but more commonly in pockets at somewhat lower levels. At Walton-on-the-Hill, Surrey, is an immense pond, appropriately known as the Mere. Modern wells require to be sunk 300 feet or so to find water hereabouts, and the village—an ancient one, once

¹ In some localities they are known indifferently as dewponds or fog-ponds. It has been suggested that the former name is not old, but it is certainly a great deal older than the discussions which have of late popularized it. Old natives of Hampstead still allude to the ponds on the Heath as the "fog-ponds," and the writer has known a man who constantly spoke of a certain pond upon the Chilterns as the "dewpond"; and his memory would go back fully 70 years from now.

boasting itself a royal manor, and still retaining what would seem to have served it as a moot-hill—must have come here because of the pond, which, according to local tradition, has never been known to fail. But mostly such ponds are small, and commonly very small.

In very many cases such water-holes are so situated as to derive part, at any rate, of their supply from surface-drainage, but in other cases they stand upon the actual crests of the high ground, in positions where they can catch no rain-water save what inconsiderable quantity falls actually into their basins. These draw their supply almost exclusively from the air. They make their own supply by condensation, and the greater the surface-area of the pond, the more rapidly does the work of condensation proceed; and while they can borrow moisture from the atmosphere under almost any conditions, it is from mist and fog that they derive it most readily. Should the pond be overhung by trees, then the point of every leaf in summer, the extremity of every twig in winter, acts as a new condenser. To realize how powerful is their joint activity one need but walk out along some upland road any day between November and February, when the weather is foggy, but otherwise fine. Before you, wherever it is open to the sky, the road will stretch dull and dry between its gaunt hedgerows; the hedges themselves will be jewelled with beads of water, condensed from the fog, but these fall into the hedge-bottoms, leaving the roadway untouched. But wherever a tree spreads its naked branches overhead, there the road's surface will be reeking wet, glistening before one as if covered with flood-water. Standing under the trees you may feel the great drops of moisture falling slowly and sullenly to the ground, like those intermittent premonitory drops of a thunderstorm in July. In the leafy months the work of condensation goes on so much the faster as there are more of the small condensers at work—so rapidly that the fall of the drops

upon the leaves and grass beneath is as loud and incessant as in heavy rain. There are ponds upon the Buckinghamshire hills where the fall of this "dew" may be heard upon the night-silence many yards away, varying in intensity with the variations of the temperature and with the direction and force of the wind, but most active when there blows a light, warm summer air from the south-west. Speaking generally, the warmer the day has been, the better works the machine, and herein lies the explanation of the seeming paradox that such ponds frequently hold more water in high July than in December; for in winter not only are the conditions of temperature less suitable, but all the myriad leaves have fallen. On the very crest of the Chilterns in Buckinghamshire, near St. Leonard's, one of these ponds has been formed fortuitously in the trench of the old Grim's Dyke—a mere pit, perhaps 20 feet across, overhung by tall beeches and half choked in winter with fallen leaves. Supply it has none save what the air provides, yet it never fails, and in dry summers which have entirely exhausted the great reservoir at Halton, at the foot-hills some 400 feet lower down, the herons have found in this diminutive pool food and water a summer long, for it swarms with multitudinous frogs.¹

A totally different thing is the artificial dewpond. A shallow, saucer-like depression, usually of severely regular plan—circular most commonly, but occasionally approaching a squarer form—its artificial origin is betrayed no less by the raised embankment surrounding part or all of its periphery. No trees overhang it, not the smallest shrub, and not a furrow marks the smooth green turf about it. So smooth is the sod, so gently and with such slight relief does the embankment swell and fall, that the whole work is invisible at the distance of a few yards. You come

¹ This particular pond has been known as "the Dewpond" for at least three-quarters of a century—sufficient answer to those who question whether the term was ever heard upon the Chiltern Hills until to-day.

upon it unexpectedly, and at first sight of its vallum there flashes into your mind the thought that here is a barrow—the rare disc-barrow, belike ; until climbing the low bank you find yourself looking down upon an unsuspected patch of water, motionless, untenanted, naked to the glare of the sun here on the very roof of the world when the surrounding Downs are baked hard by the heat, and there is never a spring or a well to be found perhaps within miles. When seen from some vantage-point a little further off, the effect is odd in the extreme—a succession of concentric rings of different hues laid there upon the open Down as if painted by man's hand. The monotonous dull green of the turf comes sharply to an end, as if ruled by a compass, and next to it is the bare white floor of the basin ; for the heat of summer shrinks the water sadly, and leaves in the midst but an exiguous pool—a perfect circle of intensest blue reflected from the sky, broken perhaps at the very centre by a tuft of rushes that have rooted there and furnish as it were a bull's-eye of darkest green. Next to the lip of the basin the sun-baked floor glares a dead chalky-white, but, growing moister and darker as it approaches the water-line, deepens finally to a muddy chocolate. Darkest green and sapphire blue, chocolate, stark white, and again the dull grey-green of the turf—it suggests nothing so much as some gigantic target of fancy pattern, left there where it fell upon the Down by some archer of prehistoric time. But in the winter, when the rushes have died down, the basin fills to the brim with water, and there is only a splash of colourless water reflecting a colourless sky.

In Wiltshire they make such ponds still, and the manner of their making is a “mystery” which rests with one or two families, whose members travel far into the adjoining chalk-counties to make ponds to order. The problem before them is to construct a basin which shall not merely create its own supply—a matter easily

achieved—but shall retain it in spite of the porous nature of the chalk. For this latter object, not in itself easy, the pond-makers would seem to have evolved the most elaborately difficult method conceivable. Selecting their own site—they are jealous of their freedom of choice, and uniformly select the very summit of a rising ground, where no surface-drainage can be looked for¹—they scoop out a smooth, shallow pan, sometimes as much as 70 yards in diameter, but commonly much smaller. The chalk thus removed is built up all round the pan to form a slight lip, and the basin is next lined with a thick covering



FIG. 90.—SECTION OF DEWPOND.

of clean, dry straw, extending outwards so as to include the lip. Over the straw is laid a lining of finely puddled clay, carefully disposed so that never a crack or flaw is discoverable; and over the lip is heaped more chalk, to a depth sufficient to safeguard the clay from damage by treading. The floor of the basin is now carefully strewn with a thin covering of flints, and when the whole is

¹ The following is quoted from an anonymous leaflet dealing with the Dewponds of the South Downs:—"They are frequently found at the heads of gullies running up the southern or seaward slopes of the hills; often indeed with their rims built up like the edge of a cup or saucer projecting into the head of the gully. Up the gullies come the mists, and as they reach the top they meet the cold air coming from the north and drop in a perpetual rain of condensation into the basin or pond put ready to receive them." The ponds at Chanctonbury (Fig. 91) are a good instance of what is meant. The cloud-cap which seems to hang motionless about a mountain-top, is merely a constantly moving current of air, made momentarily visible at that one point by condensation. So vigorous is this condensation that this alone, and no visible springs, suffices to maintain the supply of considerable rivers and to keep large areas of upland moor in the condition of bog throughout the year. But on the chalk there are no bogs because that porous material can carry off any quantity of water.

finished a little water is poured in, as it were to give the machine a start. If the work has been properly done, the pond proceeds automatically to fill itself, and continues to maintain itself until, through accident or neglect, the all-important clay lining becomes pervious. When this occurs the maker's labour is lost, his pond of no more use than a broken bowl. Therefore great care is taken to prevent heavy animals—horses and cattle—from getting into the pond, and breaking through the lining by their weight. Sheep, being lighter, may come and go with impunity, and it is for the benefit of the sheep that the ponds are mostly built.

There are variations of detail in different localities, or according to the traditions of the different members of the "mystery." Occasionally osiers are used in lieu of straw,¹ and sometimes other tiers of straw and clay are laid over the first. The Rev. A. C. Smith, speaking from his personal observation of the making of such a pond, says that "a layer of clay about 12 inches thick, mixed with lime to stay the earthworms, and covered over with first a coating of straw (to prevent the sun from cracking the clay), and finally with loose rubble, made up its waterproof bed"; and he adds that, to start it in working, "snow was carted into it at the first opportunity."² But whatever the variations of detail, the principle is always the same—a lining of elastic clay, and some contrivance to preserve its elasticity. Should this lining become wet through, the machine ceases to do its work. This is why

¹ This is said to be the practice, *e.g.*, in Norfolk.

² *British and Roman Antiquities in N. Wilts* (1884). It must be owned that his account is hardly convincing. He seems to reverse the arrangement of clay and straw; and it is not easy to see why straw was needed at all in his method. Neither does it appear a practical method, which compelled the pond-maker to wait for a sufficient snow-fall to start his pond. And, if there was snow enough to cart, how was it that it did not fall into the pond and so save the trouble of carting? Mr. Smith mentions *A Practical Treatise on Dewponds*, by H. P. Slade.

the straw and clay are so carefully carried well over the lip, so that by no possibility can any overflow from the pond get under the lining; and this also is why the builders choose a site where there is no risk of any surface-water's eating its way into the pan, or of a spring's breaking out within it.

Were the clay laid directly upon the chalk floor of the pan, then, no matter how carefully it had been puddled, unless it were of very great thickness it must speedily crack, and therefore fail to hold water. The lining of straw, being elastic, prevents such cracking. The whole is, in fact, an application, upon a magnified scale, of the principle to be seen in a thrush's nest, the lining of which never cracks until the rains of half a year have rendered sodden its foundation of dry twigs and grasses. And exactly as the thrush tempers and toughens her clay with other matter of a vegetable nature, so the pond-makers sometimes mix straw with their clay. The object in both cases is the same—to secure greater elasticity and toughness.

The pond-makers may not always be able to explain why they follow a plan so elaborate and so laborious, but experience has taught them that it is a good one.¹ To imagine that their practice is founded upon any knowledge of the relative conductivity of straw and other substances is nonsense,² as well as needless. In plain matter of fact,

¹ It has been found by actual experiment that a dewpond may rise as much as 2 inches in a single foggy night of January, and in five nights rise fully 8 inches. In the early summer the same pond collected $3\frac{1}{2}$ inches of water upon five nights of heavy dew. Fog, therefore, would seem to be a more copious source of supply than mere dew. Of course the ponds catch whatever rain happens to fall into them, but it is a phenomenal rainfall which amounts to a single inch in 24 hours, to say nothing of twice that quantity in half the time. The shepherds of the Downs will tell one that it frequently rains copiously on the hill-tops when no rain at all falls in the valleys.

² It has been thought that straw, etc., were used because these in some way aided the precipitation of dew, the work of condensation. But the determining fact is, of course, the temperature of the water, and the presence or absence of a straw lining some inches below the surface of the basin can have no appreciable effect upon the water.

their use of straw is a labour-saving expedient, for without it they must use vastly more clay,¹ and that, too, puddled with vastly more care and labour; and even then their labour may prove to be in vain.

To assert that primitive man was incapable of such ingenuity would be very rash. He may quite well have learnt the lesson of the thrush's nest; and after all, the dewpond lined with straw and clay is but a glorified development of his earliest essays in pottery, when he wove a basket of osiers or rushes, and lined it with unburnt clay. If the one could hold water, he might reasonably argue that the other would do it also. But, leaving out the question whether he was not too indolent to construct such reservoirs—and it is difficult to maintain the charge of indolence against the beings who, with tools so inadequate, constructed a Maiden Castle, or a Stonehenge, or a Devil's Dyke—it is quite certain that he did not exert himself needlessly, and equally certain that he could have obtained the desired result with infinitely less trouble by simply puddling the native chalk.

On the South Downs at any rate this used to be the normal plan, and whenever it was decided to make a dewpond of more elaborate kind, it was found necessary to send for the needful artificers out of Wiltshire, the peasantry of Sussex knowing nothing at all of such complicated contrivances.² The Sussex plan is merely to scoop a hole of the required size, and thoroughly to puddle the floor of it by assiduous trampling. In this way may be made a pond which will hold all the water it can

¹ The clay, it is to be recollected, will usually have to be fetched from a considerable distance; and to drag up to the top of a 700-feet Down, and properly to puddle, clay sufficient to line a 50-feet pond is a matter of very great labour; while the task of spreading it uniformly without flaw is one requiring very great skill, experience, and patience.

² "The Pond-makers' Arms" is the name of a Sussex inn. Does this refer to some bygone importation of droughty moonrakers, or rather to the equally thirsty iron-smiths and hammer-ponds of a vanished generation?

catch, while it bids defiance alike to the percolation of springs and surface-water, and to the footfall of the heaviest of black Sussex plough-oxen. Indeed the oxen were actually employed to assist in the puddling, for the one drawback of the Sussex pond is that the puddling needs to be repeated at intervals. It used to be customary to set a farm-lad, with the return of spring, to drive the heavy cattle round and through the pond for a whole day; or to load up a cart with a ton or so of flints, and drive that similarly over the whole of the basin, so churning up the floor and puddling it to an elasticity which would endure for another twelve months. The plan had the merits of cheapness and simplicity, and further it allowed of the pond's being made in any spot, higher or lower, according to the shepherd's requirements. Even where from neglect a pond had lost its virtue and become dry, it could readily be restored if required. The Downs between Lewes and Arundel are covered with such ponds, mostly abandoned now, although a few are still maintained and used. The process of their gradual undoing may easily be seen and watched. The heat of summer causes the water to shrink, and bakes the exposed portion of the floor until, not having been lately re-puddled, it cracks at its driest points, *i.e.*, at the outer edge. When in winter the water gathers again, it refills the pond just as far as the nearest crack and no further. In the next summer there is left a smaller supply to withstand the evaporation of the hot months, and yet more of the floor is uncovered, to be cracked as before; and so the process goes on until, the fissures reaching to the pan's lowest level, it will no longer hold water at all. Meanwhile the turf has been encroaching upon the outer portion of the basin, always pushing forward to the year's high water-mark. In the upshot the whole of the floor becomes grass-grown and reverts to the turf. One can gauge the relative age of the deserted ponds by

the depth of the vegetation and the size of the grassy ant-heaps which dot them over. And yet a very little trampling will suffice to keep the pond in work for unlimited years. To all appearance many of the finest ponds receive little other puddling than that afforded by the feet of the sheep which once a day or so come hither to drink; and considering how laborious a matter it is to cart water from the lowlands to the hills, and to what great distances the flocks must be driven for water in the lowlands, it is astonishing that not only are few such ponds made nowadays, but even the older ones are rarely kept in repair. Of late years it has been the fashion to make ponds with linings of cement, but the method seems to be far from satisfactory, the floor soon splitting and leaving the basin empty. And it is a costly method too.

How far back goes the use of artificial dewponds, whether of the simpler Sussex kind or of the more elaborate type, it is impossible to say. They have no literature apparently until the last century or so,¹ albeit of late there has been written more than enough about them. That those who occupied the hill-top forts of the chalk used such means to obtain and store water is likely enough; to prove that they did so is a more difficult matter, and amongst the cases which have been advanced in proof some are singularly unfortunate. The square dewpond within Maiden Castle, Dorchester, is not ancient at all. It was constructed as late as 1868, and in the process of making it was brought to light evidence to prove that no pond had ever existed on that spot at an

¹ Letter XXIX. of White's *Selborne* (under date 1776), has something to say about dewponds in Hampshire, and especially about the capacity of trees to act as rainmakers. The Wiltshire-born Richard Jefferies also has something to say of them (*Wild Life in a Southern County*, &c.). Both these are worth reading because they both wrote of facts which they had observed. A good deal of what has been written since Jefferies' time is neither fact nor observation.

earlier time.¹ Outside the northern walls of Cissbury camp,² Sussex, is a fine pond, and several deeply-worn cattle-ways lead diagonally down the slope towards the pond; but to argue that the pond is old because these tracks lead to it is to assume too much. There is no proof, and possibly no means of proving, that the tracks are old; and if they be so, their connexion with the existing pond is, to say the least, doubtful. If one may judge by appearances that pond is of quite recent make, for it shows none of the usual signs of even moderate age; but it is of course possible that an earlier pond may have occupied the same spot.³ As for the trackways, they are so rapidly formed upon chalk slopes that it is impossible to assume them always old. This consideration must rule out the further case of Figsbury Ring (Chlorus camp, Fig. 193), with its alleged ancient cattleways. At Ditchling Beacon⁴ are two ponds abutting upon the north-west corner of the camp. These are undeniably old in a sense, but possibly not much more than a century old, and one of them still holds a little water. It has been suggested that they were expressly designed to be covered by the defences of the camp: it is more in accord with the facts to argue that the defences of the camp have been demolished in the process of making the ponds. Lastly, there is the case of Chanetonbury (Fig. 91) four miles north of Cissbury. Here there are two ponds, each some 380 yards from the ring-fort. When Pitt-Rivers, who had always an eye to the problem of water-supply, examined the ground in 1868-9, the site of one of these was a mound, and the other he does not men-

¹ See above, p. 100.

² A plan and description of this camp will be found below, p. 647.

³ It is referred to, apparently, by Sir G. Duckett (*Wilts Mag.*, xviii, p. 179) as existing in 1879. This is not a dewpond at all, but an ordinary catchment-basin fed by surface-water, and the two trackways under discussion are themselves its best feeders. In hot summers this pond runs dry.

⁴ For plan and description see below, p. 668.

tion. Yet the latter is so placed as to suggest at once that the outlying vallum and fosse which cover the approach to the camp on this (south-east) side, were expressly deflected to include the pond. The inference from Pitt-Rivers' silence

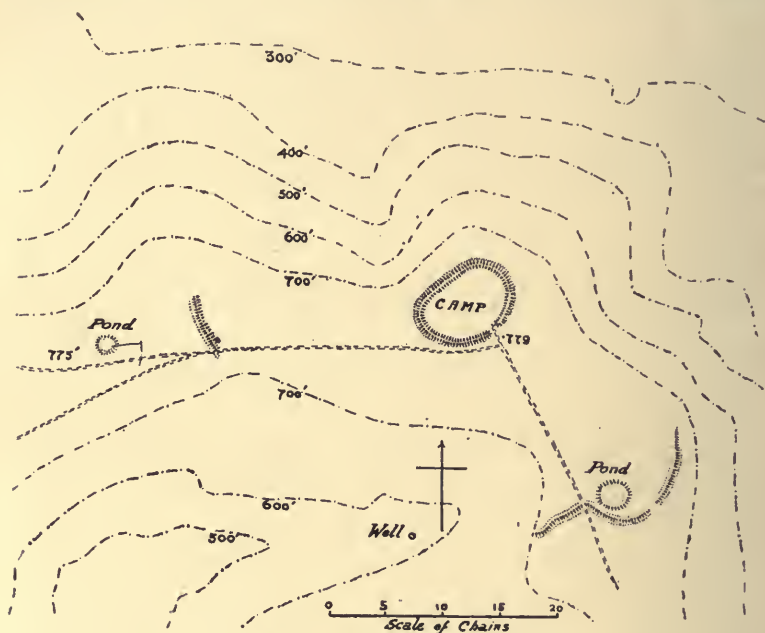


FIG. 91.—CHANCTONBURY.

is that forty years ago the pond did not exist.¹ As a matter of fact the normal way of embanking the ponds constantly

¹ The *argumentum ex silentio* is legitimate here, because Pitt-Rivers was actually looking for the water-supply. All that he could discover was a well, which he believed to be Roman, in the "bottom" to the south of the camp, and a spring below the northern face of the Downs. To anyone not acquainted with the mental capacity of the Southdown shepherds, it might seem an easy matter to learn from them at what date such a pond as this, or that at Cissbury, was constructed, if they are indeed modern. It is not easy, for the same man will tell you, almost in the same breath, that one and the same pond was made "a bit since," and that it has "always been there." The only determinable truth that the writer has been able to arrive at from their evidence is that many of the big ponds in this neighbourhood (those at Chanctonbury included) have been made within the last 40 years, and some of them according to Wiltshire methods.

suggests the valla and fosses of ancient fortifications, where there is not the slightest question that the resemblance is entirely fortuitous. The outworks at Chauctonbury followed the natural curve of the hill in the usual fashion of prehistoric engineering, and a pond-maker of the nineteenth century selected this rounded swell of the Down as a desirable spot for his dewpond. By accident he did not interfere with the old trench and vallum. The accident may be accounted fortunate for archæologists, unfortunate for those who have misinterpreted it as proof of the age of the pond. The writer is not aware of a single case in which the alleged antiquity of such ponds will bear examination; and it is no more permissible to argue the date of the pond from the presence of a camp, than to argue the age of the camp from the presence of the pond.

In point of fact the difficulty of the problem of neolithic man's water-supply has perhaps been very much exaggerated, simply because no sufficient allowance has been made for altered conditions. It is not doubted that the Down camps are in some cases, such as Cissbury, of very high antiquity indeed, and if it can be shown that the water question was possibly no difficulty in the case of Cissbury, it will probably be admitted that it was not likely to be a difficulty in other cases. When Cissbury was built the summits of the Downs may or may not have been wooded, but their lower slopes and the Weald below indubitably were densest forest. This means that the climate generally was very moist, and a single water-hole such as that near St. Leonard's, especially if there were a tree or two to help it, would suffice to supply the wants of many persons and much cattle. The fact that through the hottest of summers the turf upon the very crests of the highest Downs rarely goes brown, proves how great a supply of moisture the atmosphere can still furnish, despite deforestation and drainage. It is universally admitted that for centuries the climate

and the soil have been growing constantly drier, and in neolithic times the springs without question ran at very much higher levels and in much greater numbers than they do now; so that it is not in the least unlikely that there was a spring either in the valley to the south-east of the camp or in that to the north-east, if not in both. But even if there were no spring available, it does not follow that the inhabitants found life very difficult. It is surprising how little drink is really needed even by modern man when he has perforce to stint himself; probably his neolithic predecessor required still less, not merely for climatic reasons, but also by habit.¹ A certain amount could always be brought up in skins or jars, and it must be remembered that the warfare of those days knew nothing at all of long sieges. If the human animal could do with little water, still less would suffice for his cattle. Neolithic man would be troubled with no sentimental notions about cruelty to animals, and would certainly not be more tender to his beasts than to himself and his family. The herds could very well wait the short space of a day or two,² if occasion demanded it, and for the meantime their master had their milk to go on with. While he is as yet uncorrupted by artificial conditions of life, man, though born lazy, is capable of immense endurance; and while the modern, who pays rates, grumbles justifiably enough if he but have to fetch his water from a stand-pipe across the way,

¹ Thirst is largely dependent upon the kind of food eaten, and the food of neolithic man was very different from that of his later day representatives.

² A sheep may be penned up without water for an entire fortnight in the intense dry heat of an Australian hot season, yet will emerge not visibly any the worse. Oxen have less powers of endurance, but they do not require anything like the amount of water one would suppose. Very possibly they could get moisture enough from the dewfall of a summer's night on the Downs to keep them going all day. This, at least, is the conviction of Wiltshire folk.

primitive man—or more probably primitive woman—would think nothing of fetching the requisite supply from a distance of a mile or two, and mostly up-hill to boot.¹ Lastly, primitive culture was not measured, as culture now is, by soapsuds and baths. Save what was required for drinking and cooking, little water was wanted at all: for drinking, milk was preferred, and for cooking—well, if water could not be dispensed with entirely for a day or two without inconvenience, the same liquor would on emergency serve over and over again. Is not the Celtic cook to this day renowned for his (or her) perennial *pot-au-feu*?

There remain to notice a few isolated cases of constructions which may conceivably have been connected with the water-problem. In the centre of the hill fort of Cadbury Castle,² Tiverton, has been discovered and explored a shaft 58 feet deep. Its mouth was a funnel-shaped depression with a width of 12 feet at the surface and a depth of 3 feet. The diameter of the shaft was 8 feet at the top, tapering to 3 feet below. At the bottom it was puddled with clay. Nothing of importance was discovered within it, and on the analogy seemingly of the so-called dene-holes, and on the authority of a passage in Diodorus Siculus³ it has been declared to have been intended as a store-pit. Inasmuch as ice may be ruled out of the question, it is not obvious what commodity could be held to require so peculiar a store-chamber; and as the shaft is so narrow that it must have been impossible to get at any but the uppermost part of whatever was kept in the pit, the contrivance hardly tallies with the store-chambers alluded to by Diodorus, from which he

¹ This is still the habit amongst African savages, who fetch and store their water in calabashes.

² See the plan on p. 111.

³ See the preceding chapter, p. 249.

expressly says it was customary to take out always the oldest part of the contents. In such a pit as that at Cadbury the oldest part must have been always at the bottom, and quite out of reach. Nor, if it were a store pit, does there seem any need of the funnel-shaped orifice, which is strongly suggestive of a catchment-basin. The puddling with clay may have been advisable even if only grain were kept in the pit, but it was more than advisable, it was necessary, if the shaft were meant to hold water.

In the centre again of the area of the Late-Celtic camp on Mount Caburn,¹ Lewes, is a circular funnel-shaped pit with a diameter of 33 feet, carefully banked about. On first seeing this Pitt-Rivers remarked that it "might possibly have served as a reservoir." Subsequent investigation discovered that the bottom of the pit was in reality the opening of a shaft with a diameter of 12 feet at the mouth, quickly narrowing to $7\frac{1}{2}$ feet at a depth of 4 feet, and tapering more gradually to a width of $5\frac{1}{4}$ feet at the bottom, which was 9 feet lower still. There was no trace of any clay-puddling, but that this was expressly intended to catch water is proved by the discovery of a shallow gutter or drain, 1 foot wide and 10 inches deep, leading to the edge of the pit.

In neither case is there anything to suggest that the pit is of different date from the camp in which it stands. Both are furnished with wide mouths which have no apparent use unless it were to catch water. One of the shafts is puddled with clay, obviously to make it impervious, and the other has a gutter which at once betrays its purpose. That no clay is traceable in the pit in the Sussex camp is to be explained on the analogy of the dewponds of the neighbouring Downs; clay was not essential, for the native chalk could be made to hold

¹ See the description and plan, p. 677.

water without it.¹ There seems no room for doubt that both pits were designed expressly as water-holes.

It does not necessarily follow that either pit was a success, or so much a success as to lead to the making of such shafts in all contemporary cases. Inasmuch as the activity of a dewpond in collecting water is in direct ratio to the extent of its surface, the Caburn pit was an ingenious compromise between the normal pond and a storage tank, and was a vast economy of space, for to contain an equal amount of water there must have been required at least two ponds of the normal sort, and in a camp so small as this so much space could ill be spared. In the case of the Cadbury pit it would seem that the collecting-pond was unwisely sacrificed to the storage-tank, but possibly the original arrangement of the catchment-basin has been lost. It is noteworthy that the entire area of Caburn camp is dotted over with hut-circles. Obviously the occupants kept their cattle elsewhere, if they kept any at all, in the wide trench to the north perhaps, or in separate folds upon the Down without, so that there would be no risk of their getting into the shaft. At Cadbury Castle the huge 50-foot southern fosse might have been designed on purpose for the folding of the cattle.

That no similar shafts have been brought to light in other instances is no matter for wonder, seeing how little has been done in the way of systematic exploration of British camps. There is, however, another camp on the South Downs, viz., Edburton Hill, which can show something rather reminiscent of the tank in Mount Caburn. A plan of the camp is given on p. 660. The shallow saucer-like mound upon the southern enceinte of the fortress has

¹ It may be remarked here that although chalk is usually porous it is a very variable stone, and there are cases in which its texture is so firm and fine as to be impermeable.

a base-diameter of about 100 feet, but the central depression measures only 33 feet across, or just the same as the pit at Mount Caburn. If this was in truth a water-hole, then its peculiar position must be explained by the narrow dimensions of the camp, which measures barely 150 feet either way, so that there was no room for a pond within the area.

CHAPTER IX

ROMAN CAMPS

*“Thine, Roman, is the pilum ;
Roman, the sword is thine,
The even trench, the bristling mound,
The legion’s ordered line.”*

WITH the Roman period one might hope to feel that one was at last on *terra firma*—in the region of things certain : but not in the whole dictionary of archæology is there a term more misused than “Roman.” It is misapplied with fine indifference to brick and mortar and to earthwork, to every scrap of metal or pottery that is not too obviously modern. Enthusiasts for education may be gratified to hear the word fall with equal glibness from the lips of parson and of peasant ; it is distressing to the antiquary to find it used with equal looseness by both. When the writer found his way to Ham Hill he was solemnly assured that the great camp was Roman, Roman too the quaint carven tympanum of the little church below the hill, Roman even the splendid perpendicular gateway of the ruined priory of Montacute a mile away.¹ Such heretical doctrines are excusable in Giles and his dame, but scarcely so in their betters ; yet one rector will apply the adjective

¹ Doubtless in many cases “Roman Catholic” is meant, but the misuse of “Roman” in the sense of “Roman Catholic” (*i.e.* pre-Reformation) is no more excusable than the converse misuse of “Catholic” where “Roman Catholic” is meant.

to a late mediæval figurine found hidden in the wall of his church, and another will attach it to the paving of his garden-path, for no other reason than because it happens to be constructed in a manner unusual in his county. To cautious ears the word should convey no further meaning than that there is something to be seen that is old, or odd, or possibly both; for in most cases it will be found that the Roman had as little to do with it as had Oliver Cromwell or the Devil. Cæsar and Noll and Old Nick between them claim a most unfair share of the nation's antiquities.

Earthworks naturally bulk large amongst the many things thus miscalled, merely because they are mostly military, and the Roman was traditionally *the* military man; and the vulgar error is too often duly endorsed and authorized by the Ordnance Map. Camps of indubitably British date, Saxon and Norman entrenchments, to say nothing of minor matters such as dykes and mounds and so-called amphitheatres,—all are accredited to a people who very probably had nothing at all to do with many of them. Where one might look to find a legitimate national pride in the monuments of our forefathers there seems to be a perverse conspiracy to give the credit to anyone rather than to the Briton, and preferably to the Roman interloper. If any evidence at all be asked for, the chance finding of a coin or two, or of a handful of shivered pottery, is deemed enough.

Such evidence is emphatically not enough. The discovery of Roman coins in quantities no more proves that the Romans permanently occupied the spot, still less that they built any earthworks there observable, than the finding of a Japanese *natsuke* in the writer's house would prove a Japanese to have lived there, or than the discovery amongst its ruins at some future date of his few specimens of flint implements would prove it to have been once the dwelling of a neolithic family. Exploration of the great

cavern known as Wookey Hole in the Mendips has quite lately produced fragments of Samian ware, shaped floor-tiles of apparently Roman date, and even coins of Crispus and other Emperors ; but no one would venture to advance these as proof that our Roman conquerors ever made the Hole their residence. Like enough some of their conquered subjects in subsequent days, fleeing to the hills and the holes, did so, but certainly no Roman, and least of all a Roman with any money to spend. How, then, did these relics come there ? There is only one answer :¹ they are the leavings, not of Romans, but of Romanized Britons. At the coming of the Saxon the Briton had sore need to seek refuge in the dens of the wild beasts.² We know that he did so, for example, in the King's Scaur above Settle. With him he carried such odds and ends of his belongings as he could, and human nature being pretty much the same the world over and the centuries down, it is probable that his properties included divers odds and ends of a civilization different from his own. He "conveyed" his poor shards of Samian, his unnecessary floor-tiles, in the same spirit which prompts the equatorial savage to feel a special pride in the glass bottle for which he has no use and the European boots which do not fit him. And the objects most usually discovered are precisely those which were most likely to have attracted him—weapons, pottery and coins, and small vanities in the way of personal ornaments.

As a matter of fact, very little has been done towards recovering the history of the potter's art in Ancient Britain. Professor McKenny Hughes has pointed out some determinate facts, as, for instance, that Roman ware largely ousted the ruder British types during the Roman occupa-

¹ The only alternative theory, that they were carried hither by the action of water, is declared to be untenable.

² Gildas expressly asserts that at the Saxon Conquest the Britons "fled to the caves and the hills."

tion,¹ and that the Roman types were probably handed on traditionally from century to century after the Romans abandoned the island, until far into the Middle Ages. There is no question whatever that quantities of what passes for Roman pottery is not of Roman make or date at all. The famous Samian ware, whatever its place of origin, may perhaps be regarded as of manufacture contemporaneous with the Roman occupation, but proves nothing more. Its rarity, finish, and beauty, naturally made it attractive to the Romanized Briton, who may well have treasured it, whole or broken, just as the modern man, in no sense a collector, treasures his few pieces of what is here prized highly, but is in China and Japan, in Syria or Morocco, accounted possibly of little value.

The extraordinary profusion with which Roman coins are scattered broadcast over the sites of many Roman and Romano-British settlements is a commonplace of archæology, but it is not difficult to explain. The Saxons, whose earliest coinage was of silver, but who, on their first coming here, had none at all, attached no value to the coinage of other peoples, least of all to the debased copper and brass of the later Roman period, and the still more debased *minimi* supposed to have been minted by the Britons after the departure of the legions. With pieces of gold and silver it was another affair: the frequent finding of these in Saxon graves, often with small rings attached or otherwise perforated for suspension, proves that they were valued as ornaments or as charms. But coins of brass and copper were not so prized. The Saxons, as they stormed town after town and burned villa after villa, might and did appropriate and preserve other articles, but the bulk of the money which they discovered

¹ *Archæological Journal*, lix., pp. 219-237. In view of the discoveries at Silchester and Hod Hill this opinion may require some modification. A single contemporaneous deposit lately found at Silchester included specimens of native British, Roman, and imported vessels of Germanic type.

they flung away as so much rubbish, to lie where it fell among the ruins. Not so the native refugee, who carried with him all he could, and not seldom lost his life in trying to save his little hoard. This explains why coins, though almost invariably found with all remains of the post-Roman Britons, are usually found, not strewn broadcast, but collected in quantities larger or smaller, and often carefully bestowed in boxes, jars, etc., as if for concealment. The chance finding of single coins proves nothing at all.¹ The habit of accidentally losing things is no special peculiarity of modern days, and a Roman was as liable to lose his purse as any other man. He might lose also his hunting-gear, brooch, ring, or pocket-knife, and the chance discovery of any single article of such personal character is no more proof of a "site" than it would be to-day. These surface-finds have their own value, and ought in every instance to be recorded with all possible accuracy of type, circumstance, place, and date, but they do not in the least warrant the hasty and large inferences usually drawn from them.

While the Romanization of much of the island was in a sense marvellously complete, it is not always realized how very small must have been the genuine Roman, or let us say Italian, element in the population of Britain in Roman times. Cæsar declares that in his day the native population was "innumerable," and it is not likely to have decreased under the *Pax Romana*. But the Italians remained to the end a strictly limited class, brought into the island by considerations military, political, or commercial. It is certain that their numbers must at any time have been far less than those of the Normans who,

¹ Prof. Boyd Dawkins has something to say on this point in *Cave-Hunting*. He adds the further warning that amongst any *group* of coins so found, "the latest only gives a clue to the date" of the deposit. Judged by this test there have been found hoards, for example, which can be definitely dated as belonging to Britons of the time of the Claudian Conquest, to the period of civil war under Carausius, and to the days of the Saxon terror.

some centuries later, took their place ; certain also that their distribution over the land as a whole was far less complete and systematic than under the methodical appropriation of Norman feudalism. The Roman garrison was at no time more than a nominal four legions—say 20,000 men—with auxiliaries ; and even the legionaries of that epoch were no longer Romans, were not even Italians. Legionaries and auxiliaries alike were simply “ barbarians ” of sorts, European, Asiatic, and even African, alike only in being, not Romans, but subjects, as were the Britons, of the Romans. In many cases they were not more highly civilized than the Britons, if indeed as highly. The towns which grew up out of the Roman fortresses were peopled by non-Roman inhabitants controlled by a very small official class, in part only of Italian blood, and that indifferently pure ; and for every one such town there must have been many others which never received any purposed leaven of Italian blood at all. The very names of the towns, so far as they are known, declare that with very few exceptions they were native settlements, re-organized and rebuilt perhaps in Roman fashion, and dignified with official names of a Latin form, but retaining unquestionably their original native populations. Even the commercial class, which of course dwelt in the towns, was certainly not entirely of Italian blood.

And if the Italian element was in the minority even in the towns, it was still more so in the country. The villas which dotted the land, nowhere really numerous, were more frequently very sparse indeed, and even these were centres of native rather than of Roman life. The Roman in England was very much as is the Englishman in India : the sahib’s bungalow with its train of native servants is but a reproduction on a smaller scale of the villa of the Roman conqueror ; and as our memorial in India is to be but our empty beer bottles, so that of the Roman is mostly his broken vessels. And whereas in

India social feeling prevents any very large intermixture of the ruling and the subject races, in Roman Britain there is no trace of any such feeling; so that what little genuine Italian blood entered the island was to a great extent absorbed by intermarriage. Could we but see the land as it was in the fourth century, we should probably find that, ethnically at any rate, the Britonizing of the Romans had gone a great deal further than the Romanizing of the Britons. It is usually so where the conquerors are relatively few. In any case everything which Roman influence may have achieved in the course of four centuries by way of altering the character of the native population was undone within a vastly shorter space of time by the Teutonic race which supervened. There remained of it all little beyond a slight tinge of alien blood, a proud tradition of great days past which was to linger long in Welsh legend, and here and there the visible evidence of such stubborn ruins as the grim walls of Anderida (Pevensey), the splendours of Aquae Sulis (Bath), and the mighty system of roads which had linked up one such scene of ruin with another. The language itself betrays how complete was the obliteration, how thoroughly the new-comers cleaned the slate: of that tongue which was for almost 400 years the official speech of Britain, there remain to us but two solitary words which incontestably date from that time—the Roman's name for his roads ("street") and the Roman's name for his fortifications ("wall").¹

¹ As is well known the Latin *castra* survives in various place-names and in various forms—"chester," "caster," "Caistor," "cester," &c.; but it has not been sufficiently remembered that, if *some* of these names betray Roman sites, the conclusion that *all* do is illogical. Exactly the same is true of the word "street," and its by-forms "strat," &c., when occurring in place-names. The common name of Walton sometimes preserves the memory of a (Roman) "walled town" on or near the spot; and that of Newton is a still more reliable hint, for numbers of Saxon settlements seem to have been so called to differentiate them from older (Roman) settlements in their vicinity.

The jeremiad of old Gildas gives a sufficient picture of the Britain of the fifth and sixth centuries. It shows that the coming of the Saxons was in very truth the return of barbarism. The Teutonic tribes, who had scarcely yet reached the most rudimentary stage of civic government, destroyed every Roman town which they could reach, and what the flames spared, the less violent but not less effectual hand of Time speedily removed. The villas of course shared the fate of the towns: few are brought to light which do not betray evidence of their having been destroyed by fire. The roads fell into decay because there were few to use them and none to maintain them. Of all that the Romans had wrought in Britain only their earthworks and their superb masonry had the smallest chance to survive the tempest, and of the two the latter had the less chance, because subsequent generations used as quarries whatever was left of Roman building.¹ The earthen defences of Cassivellaunus' *oppidum* have better escaped destruction than the more pretentious walls of Verulamium; of the tremendous defences of the Roman Wall the earthworks have escaped more lightly than the masonry of any of the seventeen fortress-towns built for their protection; the paving of many a Roman road has been torn up to serve other purposes, while the *agger* which carried it still endures; and though the last stone of Calleva (Silchester) disappeared from view long years ago, the great British earthworks which ringed the town still remain almost intact. Yet the Roman would least of all have trusted to his spade-work for his memorial. He boasted himself rather of his work in

¹ In 1600 the walls of Brancaster (Norfolk) still stood 12 feet high: now the site of the fortress is scarcely determinable. The ruins of Roman Bath were still extensive in the seventeenth century: to-day there survive only such fragments as were saved by having been long ago buried. It is to be hoped that such destruction has at last gone out of fashion, at any rate where brick and mortar are concerned; but where only earthwork is visible the same spirit of Vandalism still prevails, and is mostly unheeded.

brick and stone; he was not indeed as a rule a builder of earthworks at all. He used the spade of course, as engineers must still use it, in the construction of his roads, his canals, his sea-walls, and to some extent in his entrenchments, but in all things else he was rather a mason than a sapper. It is quite true that his legionaries invariably carried trenching-tools, and that, in theory at any rate, his troops halted not for a single night without entrenching their position; but there is reason to think that the theory was not by any means rigidly translated into practice—that, if done at all, the entrenching was often rather by way of discipline than utility, and it is certain that the troops were trained to rely more upon their weapons than upon their earthworks. Each of which facts is but an additional reason why a Roman camp, properly so called,¹ is a comparatively rare thing to find, and is not commonly an impressive work when discovered.

The theoretical camp was a right-angled parallelogram, its length one-third greater than its width, and its corners rounded. Its defences, as simple as its plan, consisted of a single vallum surrounded by a single fosse, neither of great size: the ditch was theoretically at least 5 feet wide and 3 feet deep, the vallum 6 feet high and 8 feet wide. Upon the vallum was planted a stout palisade of stakes (*valli*). The regulations allowed some discretion in the manner of constructing the ditch: in some cases both

¹ The misuse of the word "camp" to denote equally the site of a Roman station and that of a temporary bivouac, is too inveterate to be cured. In the text it is used to denote what seem to have been merely the temporary entrenchments of a force upon the march, the *castra* of the ordinary Latin parlance; and no difference is here drawn between the so-called *castra exploratoria*, *castra aestiva*, &c., which figure so largely in some writers' pages, because these names are apparently used quite arbitrarily and without any sufficient evidence. Nothing is gained, and a good deal may be lost, by the use or misuse of such terms. Where there is reason to think that the work was of more permanent kind, the writer has tried to avoid the term "camp" altogether as misleading.

sides sloped regularly down until they met; in others only the inner side was thus sloped, while the outer side was perpendicular, and the floor of the ditch was level. As the former plan entailed the less labour, it was the more usual one. The materials excavated in making the ditch went towards building the vallum, which, however, would require nearly three times as much material to

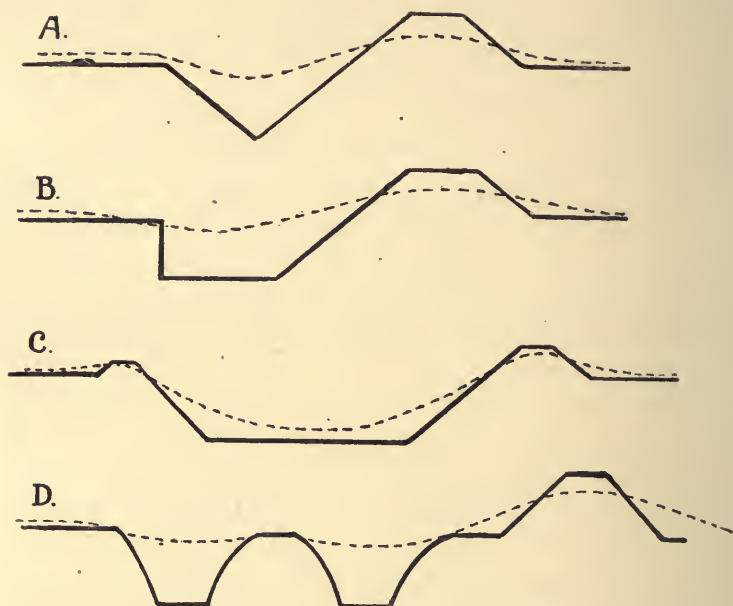


FIG. 92.—SECTIONS OF ROMAN DITCHES.

bring it up to the theoretical dimensions; and the required mass was eked out with whatever came handiest—earth, stone, brushwood, or even timber. In the centre of each of the four sides was left a gap to serve as a gateway, and these gaps might or might not be covered by slighter outlying ditches and breastworks (*claviculae*). These have rarely survived. They are shown in the plan of the Hod Hill camp (Fig. 112). When Roy¹ made his drawings of

¹ General W. Roy's volume on *The Military Antiquities of the Romans in North Britain* was published in 1793.

the camps of the Border district there were probably many still recognizable, and they are shown in most of his illustrations; but he was not altogether free from the imaginative traditions of Stukeley's century, and may very well have put them in, at least in some instances, where he fancied they ought to be. The plans of the camps at Kirkbuddo in Strathearn (Fig. 93), and at Rae Dykes near Ury (Fig. 94), three miles from Stonehaven, are here given as he saw them, *i.e.*, more correct in theory

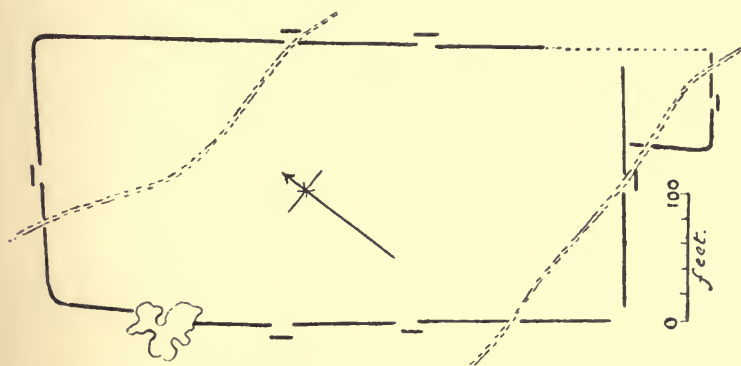


FIG. 93.—KIRKBUDDO (after Roy).

perhaps than in fact. After his drawings also are the plans of the works at Kreiginthorpe, near Kirby Thore (Fig. 95), and at Rey Cross on Stanmoor (Fig. 96). In the last-named instance it will be seen that the more normal form of outwork is replaced by a circular mound before each gateway. Both at Kreiginthorpe and at Rey Cross the remains are those of stations rather than of camps, and as a rule the gates of stations had in reality no such outworks.

Such a camp was very easily constructed, the more so as the tendency was increasingly towards economy of space and the crowding of larger numbers within smaller areas. There were hands enough available to make the work light and expeditious. It had the further

advantage that it could, on occasion, be speedily converted into a formidable fort by the addition of outlying fosses and pit-falls armed with sharpened stakes, by sowing caltrops over the approaches, and by driving

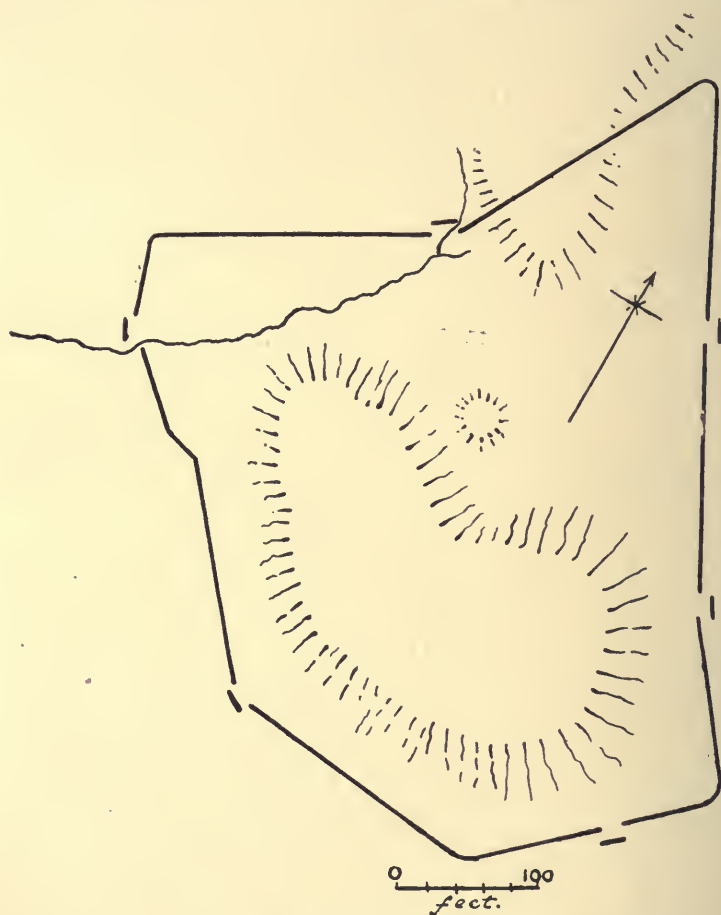


FIG. 94.—RAE DYKES (after Roy).

thorns or sharpened stakes into the outer face of the vallum. Cæsar's campaigns in Gaul furnish instances enough of the resourcefulness of the legionaries in such emergencies. On the other hand, an earthwork of so

slight a character was little calculated to retain its dignity after the lapse of many centuries. The construction of the fosse and of the vallum alike was such as rendered it easily destructible. The natural settlement of the materials

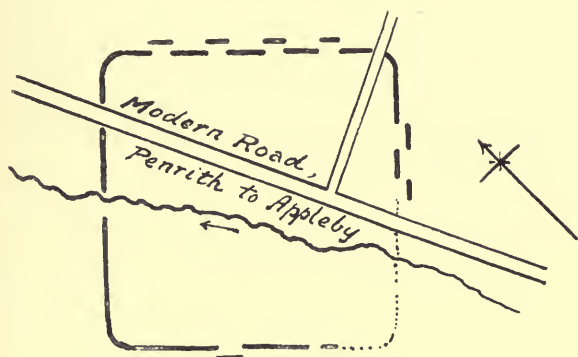


FIG. 95.—KREIGINTHORPE (after Roy).

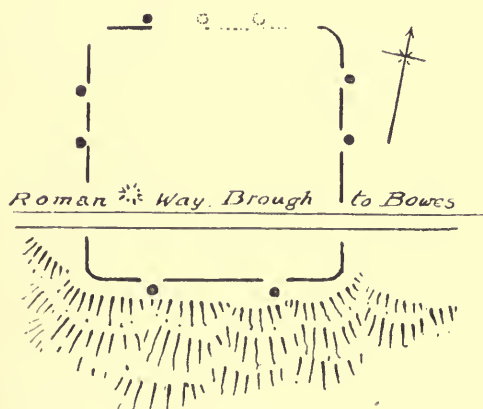


FIG. 96.—REY CROSS (after Roy).

of the newly raised rampart would in a year or two take away much of its height, and when newly thrown up it would tend to crumble rapidly; while a three-foot ditch would in most cases be filled up more speedily still. If this is true of a camp constructed in strict accordance with the theory, it is much more true of others, probably

the majority, in which the theoretical measurements were neglected. Moreover, as there was no permanent occupation of such a camp, there was no one to make good the damage done by time, whereas the defences of a British camp would be carefully maintained by its occupants. In a very few years the dip of the Roman's fosse and the relief of his vallum would alike be too slight to offer any obstacle to the plough, and the plough would in a few generations efface the last trace of the works. Where Roman camps survive, it is commonly in spots which, for whatever reason, were not brought under cultivation, or where the vallum could be utilized as and embodied in a fence. If the camp was a large one, it might survive almost intact as a single enclosed field, while smaller camps in the same way became the enclosures of orchards, gardens, and homesteads. Probably there are not a few fragments of Roman spade-work thus incorporated in hedges and similar fences, and now totally unrecognizable. In the nature of things there can be little or nothing about such works to betray their origin, unless all or most of the entire plan survives, or is at least capable of reconstitution with some degree of certainty. Nor is it likely that their sites should yield many traces of articles of Roman manufacture such as might possibly assist in their identification. Even the modern soldier leaves few traces of his bivouac, unless it be empty meat-cans or tobacco-tins. The Roman troops used neither, and their camps being constructed for the very briefest occupation only, it is unlikely that he would leave anything much upon the site.

The systematic exploration of a Roman site at Coelbren,¹ between Neath and Brecon, has established a number of facts in regard to Roman methods of fortification. The work, situated on a hill-top at an elevation of 730 feet, is

¹ See *Arch. Cambrensis*, Sixth Series, vol. vii. (1907).

a *quadrivium* with the customary four gates. Its plan is a square of 480 feet, enclosed within the usual vallum. Beyond this was a berm of 16 feet, and two ditches, of which the inner was the deeper and wider. In these ditches were found remains of sharpened oaken stakes (*cippi*), and it was evident from their small size that the ditches were designed merely as obstacles. The vallum was built up of earth and brushwood upon the natural surface, here a very wet clay, still full of springs; and to secure a firm footing there had been laid at each of the angles, and in other spots where the ground was wettest, a flooring of large pieces of dressed or undressed timber, some of them 17 feet in length. These were arranged side by side, with their larger ends turned inwards. It is suggested that these elaborate foundations at the angles were needful to carry the weight of artillery—*catapultæ* and *ballistæ*—mounted there, but probably they would have been necessary in any case, for the weight of the vallum at a right-angled corner is to all intents double that of the same vallum along the sides of the enclosure. Some of the logs employed measured 15 inches in diameter, and in one part where the soil was especially wet and unstable the flooring was double. A little stone had been used in drier parts to make the footing, but there were no traces of any buildings of masonry within the area, and apparently the site was occupied for but a short period, perhaps thirty years. The excavators concluded that it represents one of the earliest fortifications erected by the Romans in this quarter of the island, and that it was subsequently abandoned, whether as unnecessary or in favour of some drier site. There is reason to believe that the fortress was purposely dismantled when abandoned, not merely left to fall into decay.

A plan (Fig. 97) is here given of the well-known group of works near Cawthorn, six miles north-west of Pickering, Yorks. They show several exceptional features. The

doubly fossed berm surrounding No.1 bears a remarkable analogy to that of the much disputed work at Hod Hill (Fig. 112), and while the proportions and plan of the whole are characteristic of Roman work, the disposition and number of the gateways is not theoretically correct. No. 2 is curiously irregular in plan, and for no obvious reason ; and Nos. 2 and 3 both show a most unusual disposition of the gates and remarkable defences thereto. The

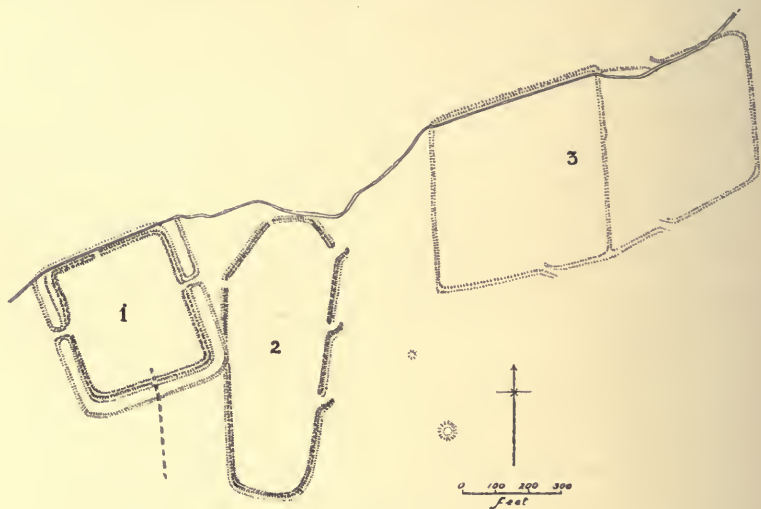


FIG. 97.—CAWTHORN CAMPS.

last-named peculiarity finds analogues elsewhere. The two works at Pigwn, Merionethshire, (Fig. 98), have their gates, here normal in number and in position, covered by similar processes of the vallum, with the difference that they are reversed ; and according to Roy there was a yet more complicated arrangement to be seen in the Roman camp at Dealgin Ross, in Strathearn (Fig. 99). The purpose of all these devices is supposed to have been to make room for double gates at each entry, the one behind the other.

Camps of large size, and possibly of proportions theoret-

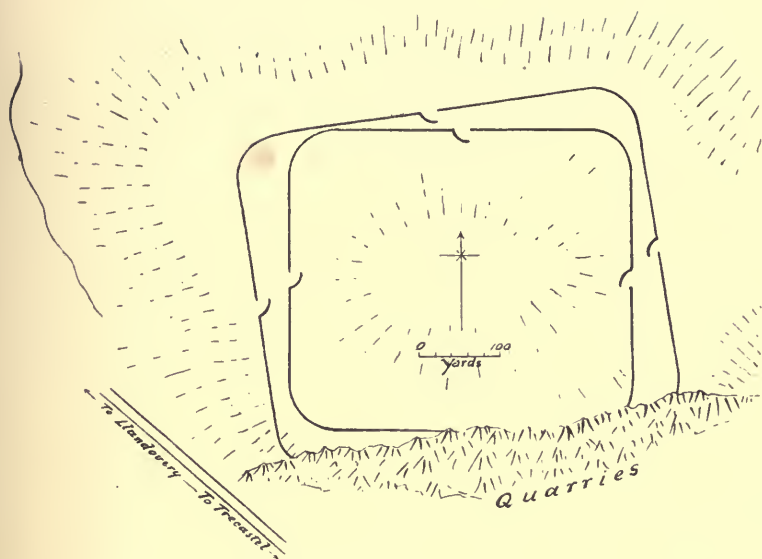


FIG. 98.—PIGWY CAMPS.

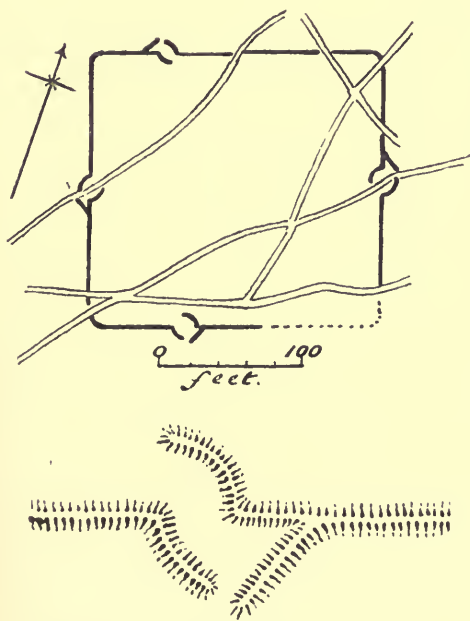


FIG. 99.—DEALGIN ROSS (AFTER ROY).

ically correct, were doubtless constructed in plenty in the earlier days of the Roman conquest, when the island was still in the main the enemy's country; for the troops would move about in considerable bodies, and there would be need to take every possible precaution against surprise. But as the conquest became more of a fact, the camps would become fewer in number, smaller in size, and weaker in their defences, as the troops moved about with less frequency, in smaller bodies, and with increasing security; while at the same time the construction of walled towns as permanent bases would render less necessary such expeditionary bivouacs. From the days of Agricola onward the province of Britannia was generally speaking at peace, save along the northern frontier, and only there was there need of constant caution, activity and watchfulness. The southern and midland parts of the island probably never saw Roman troops for months or even years together, let alone troops on active service. Such camps as were still constructed, were of course where were the fighting columns, and this was in the north. As a matter of fact the majority of the Roman camps, and beyond question the finest, are to be found in the northern counties and in the lowlands of Scotland.¹ Other towns remained the headquarters of military divisions, and there was coast-guard work to be done on the "Saxon Shore," but the real activities of military life were to be seen, if at all, only along the line of the Great Wall and beyond it. Even if the more southerly parts of Britain had been sown broadcast with camps in earlier days, these had but small chance to survive in face of the increase of population and the extension of agriculture. It was the wilder character

¹ Dr. Christison declares that "as regards Scotland, besides the forts in the rear of the Antonine Vallum, only four fortified works are known that may claim to be Roman stations—Birrens (Dumfries), Lyne (Peebles), Strageath and Ardoch.(Perth)." *Proc. Soc. Antiq. Scot.*, vol. xxx.

of the more northern parts which there necessitated the construction of camps more frequently and more carefully than elsewhere; it is the same wild and largely uncultivable character that has there kept so many of them intact. Further to the south the areas of unprofitable land were fewer and smaller, and the plough therefore had freer play.

There are other considerations to be borne in mind. Large areas of southern Britain were at the time of the conquest, and indeed long afterwards, dense forest or impassable fen, where no large number of foes could maintain themselves, and where it was impossible even for Roman troops to move to much purpose. Thus there can never have been many Roman camps in all the wide area of the Sussex Weald, which retained for centuries its forest character, or in the still wider area of the East Anglian Fens. Berkshire and Buckinghamshire were dense forest, and the western plain of Somersetshire practically a tidal swamp. Again, the various tribes did not all show the same fighting qualities, or the same determination to resist. This seems to be the explanation of the fewness of Roman camps in the south-west. That there is no certain trace of a Roman fortress or road beyond Taunton and Exeter is in itself proof that the natives beyond gave little trouble. Yet what possibilities of resistance were offered by the fastnesses of Exmoor, Dartmoor, and Cornwall!¹ But an even more important factor in determining the locality of a Roman encampment was the question of an adequate supply of wood and of water. The South Downs, and the downs of

¹ See an article in *Journal of the Royal Institution of Cornwall* (1899-1900), by the late R. N. Worth. At that date Roman coins had been found in seventy localities in the county, pottery supposed to be Roman on the estuary of the Camel and at St. Hilary, so-called miliaries at St. Hilary and at Tintagel; but of earthworks attributable to Roman builders there are very few, and these dubious, e.g., one ("Tregear") near Bodmin and another (Fig. 100) at Bossens, St. Erth.

Hampshire, Wiltshire, and Dorsetshire offer endless strategic positions of the first value, but they are mostly waterless to-day, whatever they may have been in Roman times, and they do not seem ever to have been wooded. Therefore the Roman, if he were compelled to build camps there at all, must needs build them in the valleys, and the lower their situation the more certain was their speedy destruction under the plough. In plain fact, like any other soldier he preferred to do as little expeditionary service as might be. He selected his bases, made these



FIG. 100.—BOSSONS, ST. ERTH.

his headquarters, and from these directed what further strokes were needful. It might be otherwise with the fighting Brigantes of the north, but the more pacific tribes of the *ora maritima* for the most part acquiesced speedily and finally.¹

About $2\frac{1}{2}$ miles south of Masham, Yorks, to the right of the road to Kirkby Malzeard, a fine camp of Roman type (Fig. 101) crowns a conspicuous hill nearly 700 feet above sea-level.² Advantage was taken of the natural

¹ T. Codrington remarks, with reference to the Roman Fosse Way, that "one camp only, or name suggestive of a camp, is to be found on it in the 74 miles between Leicester and Cirencester." (*Roman Roads in Britain*.)

² It is absurdly called a Danish Camp in the vicinity. The late Mr. Lukis had a statuette of Diana in silver, 8 inches high, which was ploughed up in the field next to the camp.

features of the ground, so that while the north-east side shows no trace of vallum or fosse, but was sufficiently defended by the abrupt fall of the hill, on the remaining sides a little scarping gave to the outer face of the vallum an exceptionally bold and steep relief. Seen from within the vallum rises in places to a height of 4 feet, and for the most part no more than 2 feet; but seen from without its crest is fully 10 feet above the level of the ground to the north-west, along the south-west flank it is little less, while on the south-eastern side, where alone the ditch

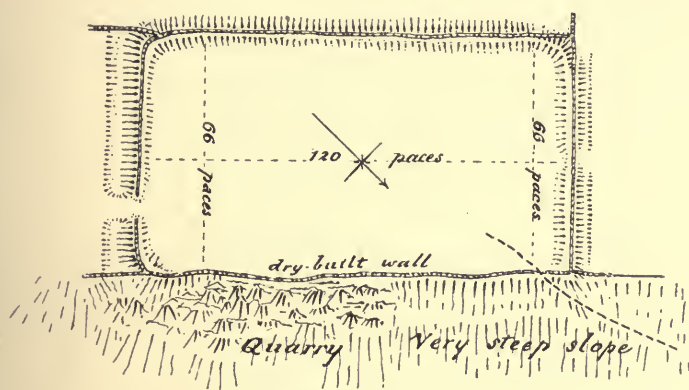


FIG. 101.—ROMAN CAMP, GREWELTHORPE.

retains its original proportions, the scarp measures upwards of 14 feet, and from the crest of the vallum to the outer lip of the ditch is a span of 30 feet. The area is almost exactly rectangular (127×66 yards), and the corners were originally boldly rounded, though this feature has been greatly interfered with by the enclosing of the area with a dry-built wall, and the planting of its vallum with trees. Exactly in the centre of the north-west end are traces of a gate, but that at the opposite end (south-west) is placed close to the eastern angle of the camp. At neither side was there any gate. There is a waterhole below the north-eastern slope.

One thing with another, Roman camps, as distinct from

Roman stations, are decidedly scarce over most parts of England. There are scores upon scores of earthworks so called that owe nothing at all to Rome, but works of the genuine Roman type are difficult to find, and when found it is not always easy to bring forward evidence sufficient to prove them actually Roman. The tests of shape, area, proportions, and defensive features are all unreliable. Rectangularity is not an exclusive feature of Roman work, for while on the one hand there are rectangular works of non-Roman origin,¹ on the other hand there are Roman works which are not rectangular. Nor is the preference for right lines peculiarly Roman, for it is found more or less in camps of all classes and ages. As to size it is impossible to lay down any rule at all; and the proportion of length to breadth, theoretically constant, in fact varies widely. It seems to be the rule that the ordinary camp, as distinct from a permanent fortress, had but one vallum and one fosse, and neither more nor less than four gates, one in the middle of each side; but all these characteristics are liable to be disguised by subsequent alterations. Given a work of which the general plan and appearance conform to the Roman type, there is always a possibility that it may be Roman, but it must fulfil at least three other requirements before possibility is raised to presumption: it must have a convenient and adequate supply of water; it must itself stand upon a reasonably dry site; and the level of the area enclosed must be the natural level of the soil. If these characteristics can all be shown to exist, or to have once existed, then the further finding of Roman relics upon the spot will have weight; and if the site can be brought into connexion with any other indubitable traces of Roman work, more especially with a road, then presumption will pass into probability. But

¹ *E.g.* the Bronze Age earthworks at Martin Down and South Lodge Camp, and the dubious but apparently non-Roman camp at Handley Hill, described in Ch. V., pp. 143-145.

the only thing which can make probability into certainty is such exhaustive excavation as shall demonstrate that there is nothing that is not Roman upon the site. Should Roman masonry be discovered, then the site is that, not of a camp, but of a station.

The water-supply is generally obvious, this point presenting one of the most marked differences between British and Roman works. Numbers of the very finest British fortresses stand upon hills which reveal no trace of any spring, pool, or well within reasonable distance; other non-Roman forts stand close beside water, if not actually in it; but the Roman's work is between the two. It is within immediate reach of a sufficient supply of fresh water, while itself standing almost invariably on perfectly dry soil. The fosse of the Roman camp was never intended to be anything but a dry ditch, and therefore the presence of water in the ditch of a work otherwise conforming to the Roman type should at once raise doubts of its Roman origin—doubts whether it be not rather a moated site of post-Roman date.¹ If the area has been artificially raised above the natural surface, then, so far at least, it is not a Roman camp, but almost certainly a mediæval "homestead" moat. In moated sites as much attention had in some cases to be paid to drainage as to defence; in a Roman camp this question did not arise, because the site selected was out of the reach of flood. It may be added that Roman camps are, with few exceptions, on perfectly level ground, and

¹ The normal rectangular plan of the moated homestead readily lends itself to confusion with Roman works, and many such sites pass for Roman camps. There are, on the other hand, a few instances in which genuine Roman camps may have been converted into moated sites. One of these is Old Ingarsby, Leicestershire, and another the extensive works known as The Sladd, St. Albans; but they are more than doubtful. Hardham Moat, near Pulborough, Sussex, seems to be a genuine case of the transfer of the term "moat" to a Roman site, apparently a small station on the Stane Street to Chichester.

generally in open positions, although later afforestation may easily have altered the last-named condition. Areas which were true forest in early times show very few Roman earthworks. In Sussex, for example, there is but one, viz., Hardham Moat, near Pulborough, and there are only one or two dubious examples in all Buckinghamshire.¹ They are fully as scarce in Kent, Hampshire, and Berkshire.²

It must never be forgotten, however, that the Roman, albeit a most convinced theorist, was above all a practical strategist, and when the circumstances required it, would throw overboard all the studied rules of castrametation. From the great Roman station at Ardoch, Perthshire, to be described in the next chapter, northward by the similar station at Strageath, and by Gask to Dupplin Loch, runs a road which was probably adopted, if not first constructed, by the Romans. Along it lie at equal distances two Roman camps of the regulation pattern, and of much the same area as that at Ardoch (470 × 400 feet), and also a series of four earthworks of unusual type (Fig. 102). These are very small circular double ring-forts, varying in diameter from 70 to 110 feet over all, with inner areas no more than 30 or 35 feet across. Round the inner area runs a vallum surrounded by a broad fosse, and in one instance there is a parapet upon the outer edge of the fosse. The relief of all is very slight, and all are built upon the dead

¹ For a so-called Roman camp on Muswell Hill, see below, p. 313. Near Chase Farm, Whaddon, is a more likely site, where the contour of a rectangular earthwork of about 8 acres may still be traced under the turf, despite centuries of cultivation. The spot, which is very little known, passes locally as "California," from the fact that some years ago, about the time of the Californian gold-rush, a labourer found here a number of gold coins; but these were of British mintage, and so far as the writer can learn, nothing distinctively Roman has ever been discovered in the vicinity.

² Similarly Prof. McK. Hughes, writing of the Cambridgeshire side: "It is curious how few traces of their military advance we find, yet how universal are the signs of long occupation which they have left." (*Journal Brit. Arch. Assoc.*, 1899.)

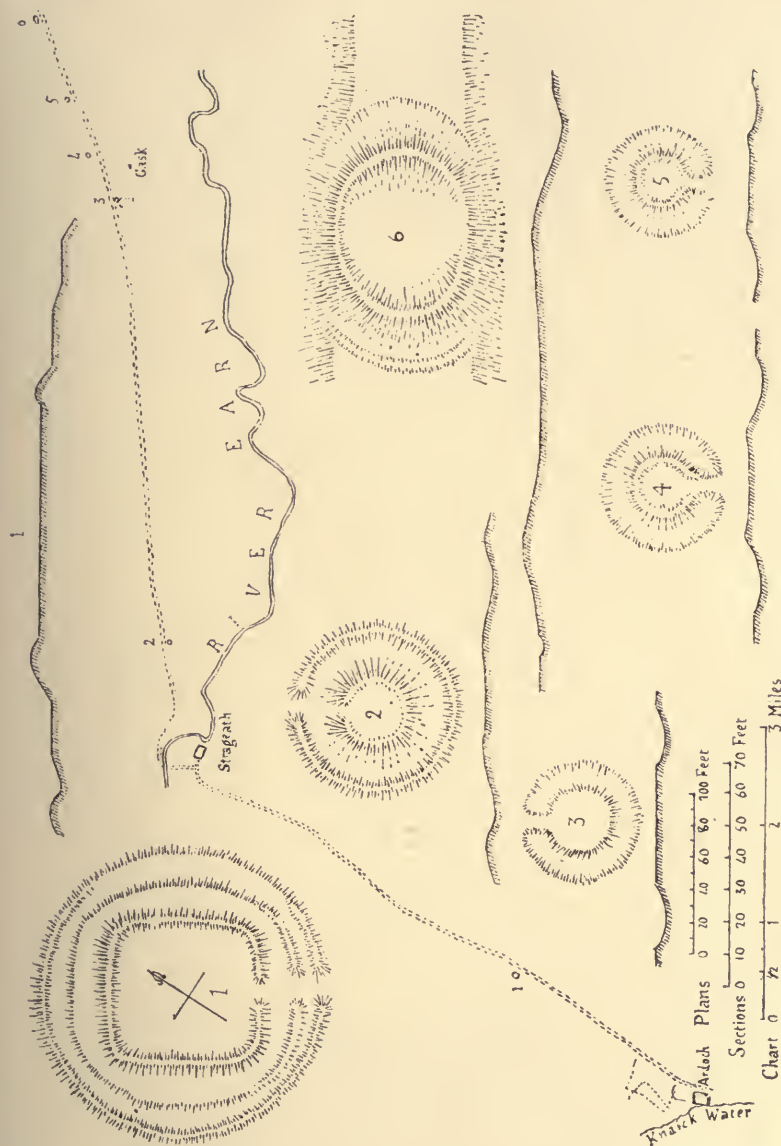


FIG. 102.—CIRCULAR WORKS, STRAGEATH.

level, and within a few yards of the roadway. All have one entrance only. A fifth fort stands also close to the road, but on somewhat higher ground, on the saddle of a

low ridge to which its plan is adapted. It is an oval work measuring 100×80 feet within, surrounded by a single vallum, and further covered by advanced fosses which cross the ridge to east and west of the fort, the measurement over all being only 180 feet. Yet a sixth work, known as Kaims Castle, has an inner area of almost square plan, measuring 80×75 feet, round which runs a circular level terrace, and below this a second, the scarps of both terraces becoming ditches where the ground rises somewhat to the north; west, and south.

Although the matter still awaits positive proof, there is very little doubt that these six anomalous forts are all of Roman construction, so many blockhouses in fact, designed to protect the road. If so, they prove as conclusively as do the greater works at Ardoch and Birrens, to be described later, that the Romans, like other strategists, could and did upon occasion waive all theories. There is not one of the six which could, if considered by itself, have been declared a Roman work, but their peculiar disposition in relation to other works of unquestionably Roman origin seems to preclude any other theory than that they also are Roman. The fifth of the series indeed, though upon a smaller scale, is precisely like the saddle-back forts of the South Downs—White Hawk Hill and Combe Hill (Fig. 222)—which are almost beyond doubt of British construction, and very early construction to boot. Once more the moral is plain—"camps" are very deceptive.

That the Romans did at times make defensive works of circular plan is conclusively proved by the recent exploration of a site known as Cwmbrwyn, $10\frac{1}{2}$ miles west-south-west of Carmarthen.¹ Here an earthwork, of which there remained visible only the slight hump of an irregular oval ring-work, with still slighter traces of an outer fosse and

¹ *Arch. Cambrensis*, vol. vii., Sixth Series (1907), p. 175.

of a gate in the eastern side, was found to have been originally an enclosure measuring about 200 × 110 feet over, surrounded by a rough but formidable wall, 15 feet in thickness, built up of soil and turves upon a course of clay. Beyond this was a level berm of 6 feet, and finally a trench with a V-section, 17 to 18 feet wide and 8 feet deep. The gate was 13 feet wide. Within the area, which had apparently been partially gravelled, were the remains of a building, 100 feet in length and 25 feet wide, constructed of squared stone laid in mortar. Roof-tiles, flue-tiles, and other remains established the Roman character of the site. Its purpose, however, remains conjectural. According to one theory it was a posting-station. More probable is a second theory, that it was a cavalry outpost of a larger infantry-camp 2 miles north-north-east, on the banks of the river Taf.

One or two examples of dubious character may be cited. On Muswell Hill, $1\frac{1}{2}$ miles north-west of Brill, in Buckinghamshire, at an elevation of some 650 feet, stands a remarkably perfect earthwork (Fig. 103). In plan almost an exact square of upwards of 90 yards to the side, its level area is surrounded by a massive bank, 30 feet broad at the base and raised 4 to 5 feet above the ground-level. Whence came the material for this bank it is difficult to see, as there is now but the very faintest indication, at one or two points outside, of there ever having been a fosse; and the extraordinary regularity of the vallum, which is as even and level as if made yesterday, would seem to suggest that none of its material has been removed to fill up the fosse, or for other purposes. The top of the vallum, 15 feet and more in width, is as smooth as a highway. There are two entrances, in the centres of opposite sides of the square. If the work were of mediæval date one would expect to see unmistakable signs of an exterior ditch or moat; and if it be not of mediæval date it is quite impossible to explain the extraordinary state of its

preservation. On the Ordnance Map it is, of course, marked as a Roman camp, but apparently for no better reason than its rectangularity, for it does not appear that the site has ever yielded any Roman remains. On the other hand the soil of the adjacent field to the south is full of delicately-worked flints, of which the presence here,

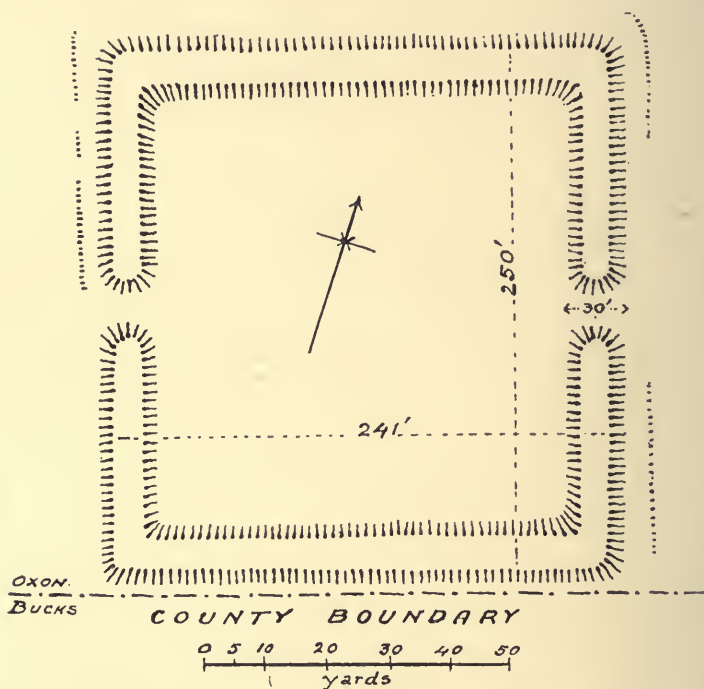


FIG. 103.—MUSWELL HILL, NEAR BRILL.

upon soil otherwise barren of flint, is conclusive proof that the spot was occupied in prehistoric times. The fact that the southern wall of the enclosure coincides with the county boundary seems to show that it is of respectable antiquity. But there is in reality no reason for thinking it Roman: the area is too small for a permanent station, while the rampart is too massive for a temporary camp;

and moreover the angles lack the characteristic roundness of Roman work ; but that, well preserved as it is, and in a situation where cultivation has proceeded without interruption for generations, it can be older even than Roman times would seem impossible to believe.

In Rook Wood, Great Missenden, Bucks, is another

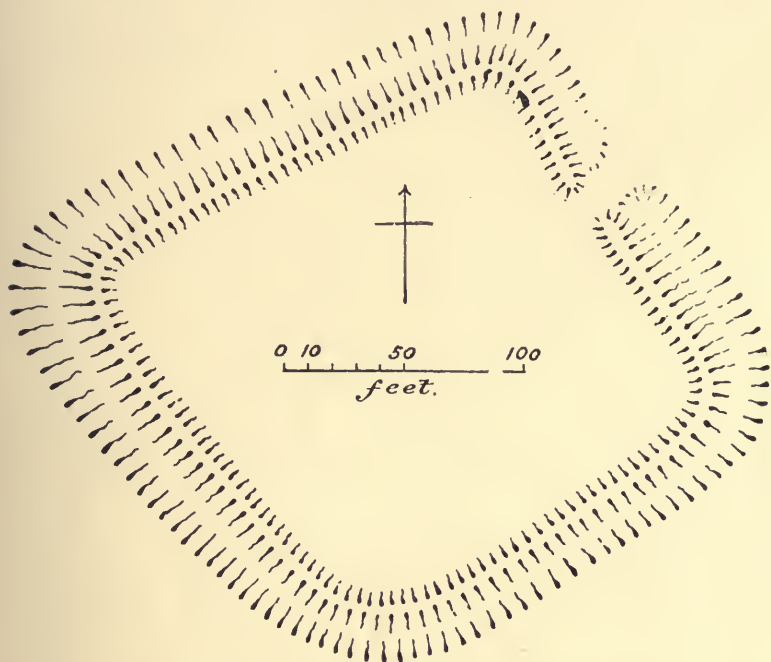


FIG. 104.—CASTLE HILL CAMP, GREAT MISSENDEN.

work of rectangular plan, known as Castle Hill Camp (Fig. 104). Like that at Muswell Hill it is almost square, but smaller (*circa* 60 yards across); but unlike the other it has only one entrance; and it differs also in having its angles decidedly rounded, while the vallum is of more normal proportions, and there is a considerable external fosse. Nothing is known of its origin or date. It may very well belong to the class of homestead-moats, for the

absence of water at the present day is no proof that the ditch was always dry.¹

About a mile equi-distant from Sarratt and Flaunden, in Hertfordshire, is another rectangular work, but much smaller, measuring 30 paces by 24 paces only, or about $\frac{1}{8}$ th of an acre. It is surrounded by a low vallum and a ditch, and is well preserved. There are no determinable entrances, but from the western side a straight broad bank runs out at right angles for some yards, flanking a small water-hole, apparently a dewpond, for the site is thickly planted. The proportions, the strictly rectilinear and rectangular plan, and the character of the defences, are all of the accepted Roman type, yet there is grave reason to doubt whether this also be not a mediæval work.

Fig. 100 shows the so-called Roman camp at Bossens, near St. Erth, Cornwall. This, again, is of very small dimensions, 152 feet in length by 136 feet in width, but the plan, the rounded angles, and the relative scale of the defences, all suggest Roman work. The single gateway is, however, a non-Roman feature, so that, despite the finding of Roman coins here, it is permissible to doubt whether it be a work of Roman origin, the more so as it lies so far beyond any proven traces of the Roman occupation of the south-west.

Three earthworks, all of one type standing upon Walton Heath, Surrey, are unhesitatingly attributed to the Romans, but the most valid reason for such attribution appears to be that there undoubtedly was a Roman settlement somewhere in the vicinity.² All three works

¹ The work has some resemblance to that at Bray's Wood (Fig. 163), $2\frac{3}{4}$ miles to the north. Near the church of Great Missenden, on the hill some three-quarters of a mile to the north-west, there used to stand another work of apparently similar plan, now destroyed.

² The remains of a villa have been found at Walton, the name of which raises the suspicion that some sort of walled town stood here. The forgery known by the name of Richard of Cirencester put Tedertis here—a supposed Roman original of the modern Tadworth.

are rectangular and rectilinear, all have one vallum and one fosse, and all are so thickly overgrown with heather as to be difficult to find, especially as their relief is but slight in two cases out of the three, the soil being a sandy gravel which rapidly wastes. The largest and most noticeable is only 65 paces by 45 paces; the second is a square of 34 paces; and the third is a tiny enclosure of 24 paces by 17 paces. From crest of vallum to outer lip of the ditch is some 20 feet in the case of the smaller works, more in the largest of the three. The square work

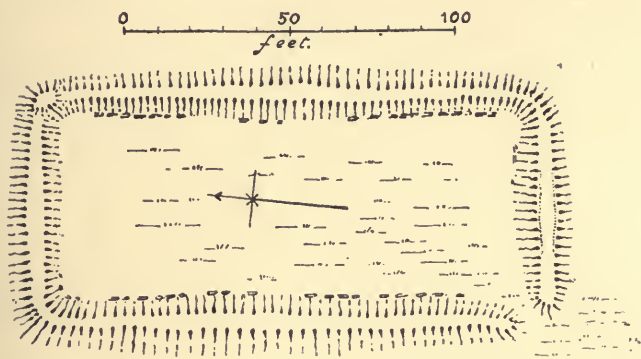


FIG. 105.—KING ARTHUR'S HALL, LEAZE.

seems to have had an entrance in the middle of one side. In the others no gates are determinable.

To regard these as military works is scarcely reasonable: the largest alone is large enough, the others are much too small. Moated sites in the proper sense they cannot have been, for the soil will not hold water. Only excavation can possibly throw any light on their date or purpose, and even so the possibility is slight. But until some valid evidence is forthcoming it is unwarrantable to speak of them as Roman at all, still more unwarrantable to say they are Roman *castra*.

Certainly not Roman, and apparently unique in England, is the rectangular enclosure (Fig. 105) called

King Arthur's Hall, near Leaze, Cornwall. Here a broad and almost rectilineal vallum of earth, sloping naturally to the surface level on the outer side, but on the inner side held up by a rude retaining-wall of single stones, forms an enclosure measuring from crest to crest 160 by 66 feet. The longer axis lies a little west of north by south; there is no outer fosse; and the original entrance seems to have been at the south-western corner. It has never, apparently, been explored, but the exploration of two very similar enclosures in Brittany seemed to show that they had been built as *ustrinæ*, or crematories for the dead.¹

Speaking from the point of view of the sight-seer, Roman camps of the normal type are amongst the least impressive of all our earthworks. Originally of but slight construction, they have been so badly treated by time as to retain little of whatever dignity they once possessed. So rapidly does the shallow fosse fill up and the vallum crumble, that often no eye but that of the trained enthusiast can detect the faint traces which remain. There is little to strike the imagination in these all but obliterated mounds and ditches under their uniform mantle of green turf. Nor for that matter is there much to be made out of such examples as are best preserved. The speculations of those who, like General Roy, endeavour to reconstruct the whole story of an Agricola's campaigns from the surviving *vestigia* of Roman entrenchments, proven or imagined, are ingenious, and may possibly come near the truth at times, but they *prove* nothing. Even spade-work will probably reveal no more than the original measurements of the fosse, so that even the collector with a cabinet to fill passes them by almost as contemptuously as does

¹ See an article by A. L. Lewis in *Journal of the Anthropol. Inst.*, August, 1895. Mr. J. B. Cornish inclines to believe that King Arthur's Hall was nothing more than an enclosure for cattle (*Vict. Co. Hist. Cornwall*, vol. i.). Local tradition says that it was once a Christian Church.

the photographer in search of a "subject." They have no history, usually no name. The archæologist, who rightly holds them in greater reverence, may weave what fancies he will about their shrunken lines,—may, if he please, see a greener grass, a ruddier heather, on these nameless sites, and with Omar

"Sometimes think blows never rose so red
As on the spot where once a Cæsar bled";

but such fancies are luxuries which he must needs keep to himself, simply because they are fancies and nothing more, "notions" which no power of imagination or eloquence can transmute into truths. If he would make disciples to his cult, he were wise, perhaps, to choose for his first object-lessons in the fascination and mystery of ancient earth-work something more robustly obvious and impressive than any Roman camp can show.

CHAPTER X

ROMAN STATIONS

*“ And, little town, thy streets for evermore
Will silent be, and not a soul to tell
Why thou art desolate can e'er return.”*

THE position, character, and growth of Roman towns in Britain depended, as such things always do, upon considerations of strategy, organization, commerce, and various other matters less obvious. With the Roman, who was primarily an alien conqueror, strategic considerations had at the outset the greatest weight. This explains why in so many cases the later town is merely the earlier *castra* translated in bricks and mortar. In some few cases the Roman town had seemingly no relation to any earlier settlement; it was a new position occupied and fortified for newly arisen strategic reasons. More frequently the invaders occupied and fortified a British town as they found it. But most commonly they built a new town in their own way close beside the site of some important British settlement.

Where the temporary camp was subsequently adopted as a permanent station, there would be little modification of the original plan. The site was entrenched within a more formidable ditch, walls of masonry replaced the earthen vallum, and on the exact lines of the *castra* with

its four gates¹ arose curtain-walls of stone or rubble laid in mortar and bonded with the tell-tale courses of flat tile which almost invariably accompany Roman building. At the four corners, on either side of each gate, and along the curtain-walls at intervals proportionate to their length, were set towers, usually drum-shaped and solid.² The gates became round-headed archways, usually double, closed by doors of wood or metal or both, and provided with guard-houses on the inner side.³ So excellent was the masonry, so tough the mortar, so sure the foundations,⁴ that after fifteen centuries or more some of these fortresses remain almost intact, as at Burgh Castle near Yarmouth, at Pevensey, and at Porchester. In cases where a considerable stream covered one side of the fortress, the walls upon that side may have been less formidable, but it is doubtful whether the stream alone was held to be a sufficient defence.⁵

¹ The number was not invariable. The stations of Cilurnum (Chesters) and Amboglanna (Birdoswald) on the Wall had each six gates, although these fortresses—they covered something over five acres—were only of large size as compared with others in that district.

² The great multangular tower at York shows nine faces in a periphery of 270°, *i.e.*, it was of dodecagonal plan. In some cases there are no towers along the curtain-wall, *e.g.*, at Silchester.

³ There are many examples to be seen in the stations of the Wall, and one remains in the Newport Arch at Lincoln. Where the gate is double, the two passages are sometimes of the same span, but more frequently of different sizes, the *spina* (dividing wall) being eccentric, as at Hard Knot Castle, Cumberland. Each passage was commonly provided with two pairs of *valve* (double doors), which opened back upon the passage-walls. They were sometimes hinged, sometimes turned upon pivots let into sockets in the stone sill. As a rule there were no gate-towers right and left, but exceptions are known, *e.g.*, in the station at Haltwhistle Burn, where "huge semicircular constructions" flanked the entry.

⁴ Yet as a rule the foundations of Roman work are not deep. The huge walls and towers of Burgh Castle actually rested in part upon planks of oak laid upon the wet soil; and the same was the case at Pevensey and Ribchester. Their strength lay rather in the quality of the mortar used, or rather of the cement.

⁵ Such positions were, *e.g.*, Burgh Castle (Fig. 106), near Yarmouth, on the banks of the Waveney, and London. The river-wall at Burgh Castle has long vanished, whereas the wall enclosing the other three sides of the fortress

The area thus enclosed was usually rectangular, but not by any means always of the exact proportions of the theoretical *castra*. These proportions are found in

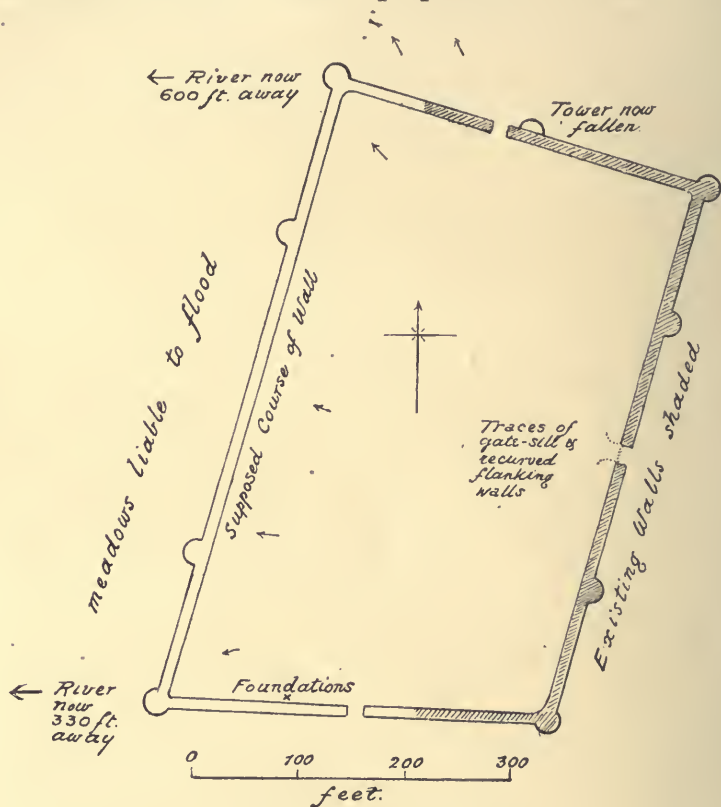


FIG. 106.—BURGH CASTLE.

comparatively few instances, as at Ancaster, Bincester, Birdoswald, Chesters, Catterick, Grassy Walls on the Tay,

remains to this day one of our finest surviving specimens of its kind of work. The inference is that the river-wall was at any rate weaker than the rest. In the case of London the nature of the defences towards the river is still a vexed question. At Castle Dykes, Ripon (described below), there appears to have been neither wall nor ditch on the fourth side, overlooking the stream. The same is true of the Wall-station at Corstopitum (near Corbridge), where the southern side, overlooking the swampy land by the Tyne, was unwallled.

Lyne Kirk in Tweeddale, Minskip, and Natland near Kendal. Elsewhere the plan shows every variation from an actual square to a parallelogram of which the breadth is but half the length or even less. The square plan is

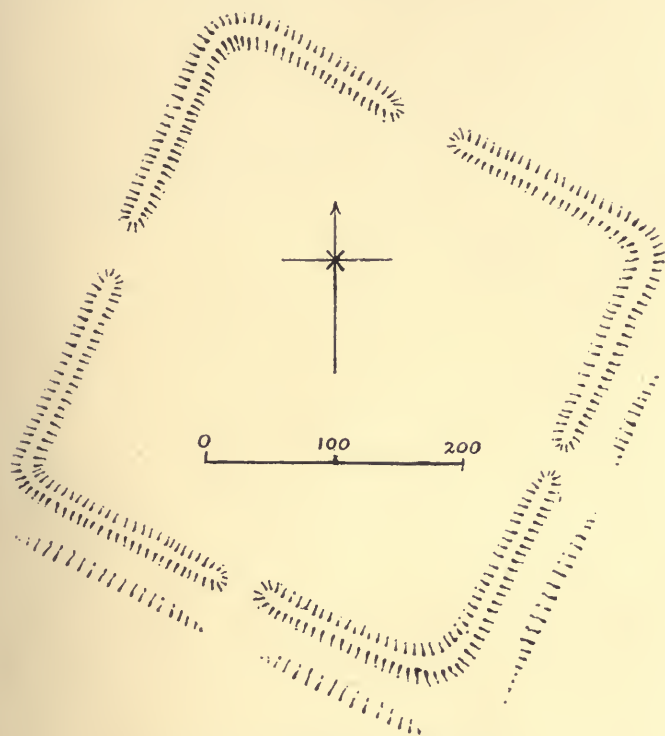


FIG. 107.—MELANDRA, DERBYSHIRE.

found at Melandra (Fig. 107), Porchester, Hard Knot, High Riechester, Ebchester, Bowes, Maryport, Brancaster, Kirkby Thore, Alchester, and elsewhere. At Templeborough, Chesterford, Ambleside, Grantchester, and Horncastle, the length is to the breadth as five to three; and at Burgh Castle it is as 100 to 47. The areas vary quite as widely. The fortress at Minskip, near Aldborough, Yorks, contained only 1·55 acres; Porchester, 2·5 acres; Hard Knot, 3·05 acres; Roman Manchester and

Templeborough (near Sheffield), 5 acres; Brancaster, 8.25; while Tasburgh rose to 24 acres; Caister St. Edmunds to 30, Towcester to 40, Caerlleon to close upon 50, York to 52, and Chesterford to little short of 60 acres.¹

The area was intersected at right angles by two main thoroughfares running from gate to gate, parallel with which ran lesser streets² dividing the whole into rectangular blocks (*insulae*). Originally these were but the grass avenues left between the ordered lines of the soldiers' tents or huts. The tents and huts gave way to more permanent dwellings of masonry, the grass to pavement, and thus the whole camp was translated into a town of rectilinear streets. With the lapse of years the regularity of the less important streets tended to disappear, but the main thoroughfares have in many cases preserved their plan and their importance to this day. It is the familiar "Carfax"³ plan so obvious at Chester, Chichester and elsewhere, and still recognizable even in London.

A complete station of regular type has been excavated at Newstead, near Melrose.⁴ The gates, the principal and subordinate thoroughfares, the blocks of buildings, and the central quadrilateral *prætorium*, have all been laid open. Of the buildings two-thirds appear to have been intended as barracks for the garrison, the remainder as Government offices, arsenals, and storehouses. The enclosing wall was $7\frac{1}{2}$ feet in thickness. From the evidence of the coins

¹ Prof. Haverfield gives the area of a station garrisoned by a full legion at 50 acres more or less; that of a station held by an auxiliary regiment as from 5 to 10 acres. But though each station was doubtless originally designed for the accommodation of a definite force, it is obvious that its importance must have altered with the course of years, and where there was any long-continued occupation the limits of the station must have altered accordingly.

² The stations of the Wall supply several examples of these extremely narrow secondary streets—mere alleys or *venelles*.

³ From *quatre foix* (= *quadrivium*), "a place where four roads meet."

⁴ See *Scottish Historical Review*, vol. iv. p. 443 (1907), where a plan is given.

discovered it is believed that the station ceased to be occupied about 190 A.D.

Castle Dykes (Fig. 108), three miles north of Ripon, is one of the finest examples of a minor station to be found south of the Wall. Its plan shows a very practical economy

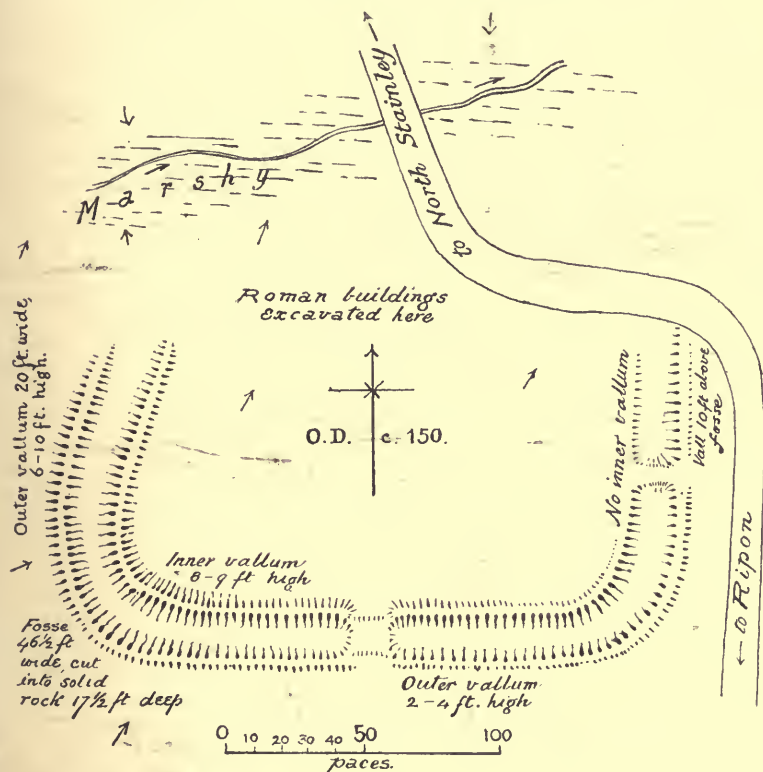


FIG. 108.—CASTLE DYKES, RIPON.

of labour, for the northern side of the station was covered only by the swampy hollow along which flows the Light Water, a small feeder of the Ure. When the camp was built this was doubtless a considerable stream, and if any artificial defences were raised on this side, they were too small to leave any traces. The three remaining sides,

enclosing an area of $5\frac{1}{2}$ acres with a very gentle slope to the east and the north, are entrenched within an enormous flat-floored fosse 15 feet in depth and fully 50 feet from lip to lip on the southern side. In comparison with this fosse the vallum and parapet are but slight, excepting upon the western side, where the lie of the ground required their greater development, and the parapet rises to the dignity of a second vallum with a width of 20 feet and a height of 6 to 10 feet above the ground without. Along the south side the parapet is 2—4 feet high, and the vallum little more; while at the east the vallum disappears altogether and the parapet is again developed to somewhat larger proportions. The fosse is perfectly regular, its sides as clean cut and its broad floor as level as if made by modern engineers. There are two entrances, respectively in the middle of the southern and eastern sides. The former has a width of 12 paces, the latter of 8 paces, the fosse partially filled up at each point to furnish a passage. There are no outworks now traceable. The corners of the camp are boldly rounded. At the north-west the lines vanish on the slope running down to the stream, and at the north-east they have been obliterated by the present high road, which here curves round upon the course of the original fosse. Exploration of the site some years ago brought to light the foundations of baths and other buildings lying on either hand of a central street which commenced at the southern gate and intersected the area. The buildings were of two dates; later and less careful work had been run up upon the ruins of earlier buildings, which had evidently been destroyed by violence. The position, which is four miles west of the Great North Road, in marked contrast with that of Grewelthorpe Camp, four miles further west, is low-lying, and was apparently intended to guard the ford by which a vicinal road ran direct from Ilkley (Olicana) to Catte-
rick (Cataractonium). It was a byway, traversing a wild

and mostly uncultivated country; the station therefore was small, and its population could not afford to neglect their defences. Yet there was no discoverable sign that it had ever been walled with masonry.¹

Hard Knot Castle, perched high upon the fells dividing the Valley of the Duddon from that of the Esk, and facing westward down Eskdale towards Muncaster, is a typical example of the smallest kind of fort. To all intents an exact square, its area, no more than 3 acres and 3 poles in all, is girt by massive stone walls of 5 or $5\frac{1}{2}$ feet in thickness. The corners are rounded, and built up against the *inner* face of each was a square tower, 12 feet on the side, probably designed to carry *ballistæ*. The gates, set in the middle of each wall, were double-arched. There was no fosse. Within the area have been found the foundations of buildings, much resembling those at Cwmbwyn (p. 312), and probably representing barracks. The garrison can scarcely have mustered more than a single cohort, and they must have found their vigil up above the mists a wearisome monotony.²

The exploration by the Society of Scottish Antiquaries of the two great stations at Ardoch,³ in Perthshire, and Birrens⁴ near Middlebie, has completely disproved a good deal which previously passed amongst antiquaries

¹ Formidable and striking as the site is, it remained almost unknown until 1866, when exploration was at last commenced. The immediate cause leading thereto was the finding of a single rare coin and the chance upcasting of a *tessera* or two on a mole-heap. *De minimis!*

² For the site and its exploration see *Transactions Cumberland and Westmorland Soc.*, vol. xvi. (1893). The station at Haltwhistle Burn had an area of no more than $\frac{3}{4}$ acre within the walls, but its fosse was 25 feet wide and proportionally deep.

³ *Proc. Soc. Antig. Scotland*, vol. xxxii. (1897-8).

⁴ *Op. cit.*, vol. xxx. (1895-6). The name of Birrens, Birrenswark, Burrens, Borrens, Borrowens, Burians, or Burwens, attaching to various earthworks, Roman or otherwise, is found as far north as Shetland and as far south as Cumberland. It is connected with Anglo-Saxon *byrigen*, "buryings," i.e., "barrows," and corresponds exactly to the dialectic variant "Barrow" for "Borough," as in Elworthy Barrows, Thunderbarrow, &c.

as beyond question, and has thrown an entirely new light upon other similar sites as yet unexplored. Both Ardoch and Birrens show indeed the normal rectangular Roman plan, but they show also a most extraordinary complexity of defences, there being in the former case five fosses upon a single side of the camp, and at Birrens no less than six. Traditional archæology, having rightly guessed the sites to be Roman, and having wrongly postulated that the Romans never constructed more than one fosse about their *castra*, found itself hard put to reconcile theory with fact. After "great argument about it and about," it was usually concluded that these were Roman works which had either been placed within earthworks of an older date, or had been added to and elaborated at some later period. How an earlier camp came to be so very Roman in plan, or who were the later engineers that spent so much labour upon the improvement of the sites, were questions which remained unanswered. Only the spade was able to clear up the mystery.

As a matter of fact in each instance, their extraordinary elaboration notwithstanding, the earthworks have been found to be entirely Roman, owing nothing to earlier or later ages; and as being most remarkable examples of the value of spade-work when applied to the problems of Roman Britain, both cases deserve some consideration.

The works at Birrens form a parallelogram of 500×300 yards, lying in the angle made by the junction of Middlebie Burn (E.) with the Mein Water (S.). The area is surrounded by an enormous vallum constructed after the fashion of the Roman siege-mounds of earth alternating with layers of brushwood, and resting in places upon a carefully laid course of flag-stones. Natural wastage, and possibly also human agency in the search for building-stone, have so spread this vallum that at the

present time it is always 40 feet, and often more than 50 feet in width, though rising but 3 or 4 feet above the area. The further defences upon the northern and best preserved side were as follows: at the foot of the vallum was a berm, and beyond this a series of six parallel trenches divided merely by balks (*i.e.*, strips of soil left *in situ* and at their original level). These trenches were originally about 5 feet in depth, and usually 2 or 3 feet wide at the bottoms, which were flat, the innermost trench showing a rather wider section than the others.¹ The balks were gently rounded off at the top. Beyond these works was a second vallum. The whole series of defences was continued round the eastern side until interrupted by the fall of the ground to Middlebie Burn. Whether they were also carried fully round the western side has not been determined, all that is now visible in that quarter being the great inner vallum and a single trench.

On the northern and western sides were found gates respectively 5 and 10 feet in width, the road-way through the vallum flanked by walls 3 feet in thickness. On the northern side these walls were projected for a distance of 30 feet, and on the western side for half that length. There was no gate on the eastern side. Whether any existed on the south is not known, that end of the camp having been much eroded by the Mein Water.

The area had been regularly laid out in accordance with the theoretical Roman plan. A broad street, running in a right line from each gate, divided the whole into four sections, which were further subdivided by narrower lanes running from east to west, so that the whole floor was partitioned into a number of parallelograms

¹ These were merely obstacle-trenches, like those at Coelbren (p. 300), and like those also, they were probably intended to be furnished with *cippi* and *lilia* or similar contrivances.

of uniform size. Each of these *insule* was occupied by buildings, arranged all in narrow blocks, saving that in the actual centre of the area stood an elaborate Forum, some 70 × 75 feet, and east and west of it two other blocks of building of much the same dimensions. Where space was not available for a street, each block of buildings was separated from the next by a space barely wide enough to allow a man to pass; and between the vallum and the whole mass of buildings there ran all round the area a broad open space some 16 feet in width. At the foot of the eastern vallum were found four ovens side by side. Evidence was forthcoming that the station had been twice occupied. The original fortress had been abandoned and razed to the ground, and after the lapse of a considerable period had been rebuilt and reoccupied, probably without further intermission, until the time when the Romans finally withdrew from this locality. Whether it was ever walled is uncertain, but the probabilities are against it. If there was ever a wall at all, it may have been simply a stone-facing to the great vallum.

The advanced position of this station—its Roman name is quite unknown—in the very heart of the untamed northern country, at once explains the extraordinary character of its defences; and the utter destruction which put an abrupt period to its earlier occupation—a destruction so complete that those who rebuilt it did not trouble themselves to seek out the foundations of the older town, but constructed as it were a replica of the old plan with the same streets, lanes, passages and blocks of building, but all on new foundations—is proof that the tribes of the North were thorough in their hostility. The station at Ardoch, a point yet more remote, illustrates the same fact even more forcibly. Here the general scheme of defence was the same (Fig. 109): there were inner and outer ramparts, between which lay

a series of trenches¹ with intervening balks. On the eastern side these trenches were five; on the north the number remained the same, but the plan was complicated

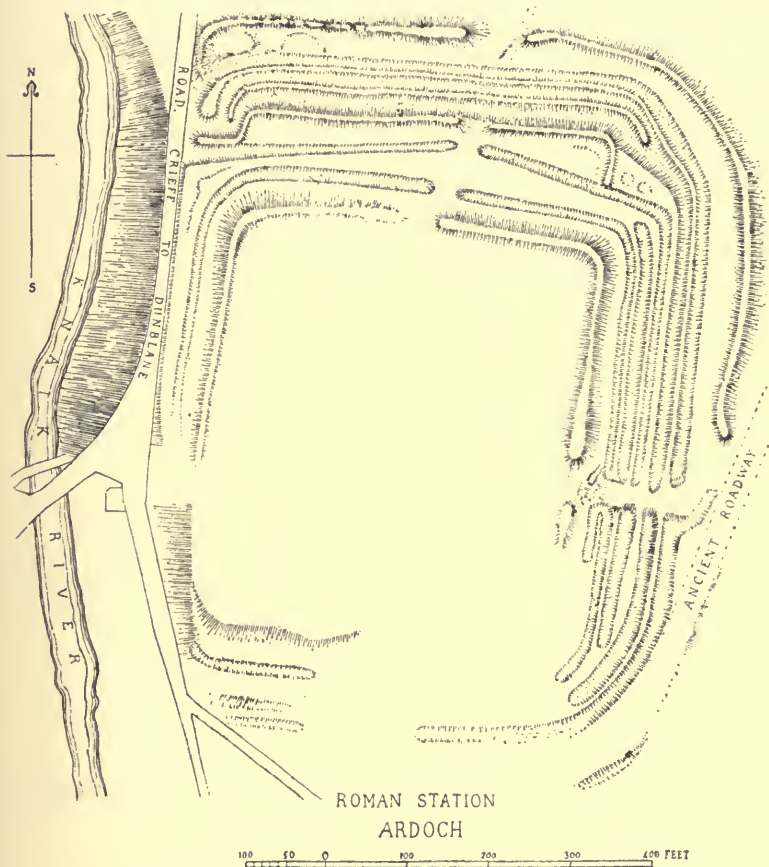


FIG. 109.—ARDOCH, PERTHSHIRE.

by the extension of two of the balks into ravelines, of which the outer one (between the second and third trenches) was further provided with a raised breastwork. On the two remaining sides, just as at Birrens, the

¹ Unlike those at Birrens, the trenches at Ardoch had a V-shaped section,

original works have been all but obliterated. There were gates on the north and the east, but whether others ever existed is not known. Exploration of the area revealed the foundations of buildings as closely packed and as orderly in arrangement as at Birrens, but with the remarkable difference that they had been constructed of

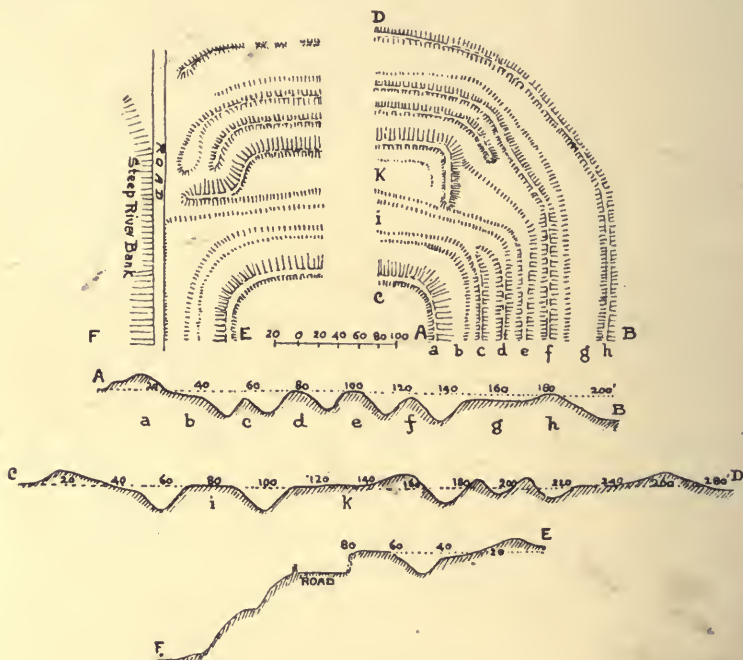


FIG. 110.—ARDOCH: Plan of N.E. and N.W. Angles, and Enlarged Sections of E., N., and W. Sides.

wood throughout.¹ Evidently the fortress at Ardoch never lived to reach the fully developed stage of brick

¹ They were built upon horizontal beams laid in shallow trenches, which were lined with a flooring of clay and cobbles firmly rammed together. Certain traces of foundation near the centre had of course been dubbed the *Prætorium*. Excavation showed them to be the remains of a mediæval chapel standing within its churchyard wall, a rectangle of some 80 feet each way. "*Prætorian here, Prætorian there! I mind weel the bigging o't.*" The family of Jonathan Oldbuck of Monkbarms is still numerous and flourishing.

and mortar. The latest coins known to have been found there belong to the reign of the Emperor Hadrian, the builder of the great Wall between Tyne and Solway. Probably Ardoch was abandoned when the Wall was completed, and possibly at his orders. But possibly no orders were required: the finding within the area of a number of sling-stones of burnt clay suggests a more unconsidered fate, for it is known that the "barbarians" used to heat such missiles to red heat and therewith fire the inflammable buildings within the enemy's camp. That they thus terminated the Roman occupation of Ardoch is not demonstrable, but the presence of the sling-stones shows that at any rate they tried.

The results attained at Ardoch and Birrens have bearings upon certain earthworks elsewhere. It had long been agreed that Antoninus constructed a vallum—a miniature edition of Hadrian's Wall—across Scotland from the Forth to the Clyde. The remains of this work, insignificant to-day, were considerable a century ago, and Roy gives a series of plans of all the fortresses, or castles, which guarded it. These show a similar multiplication of trenches, and in Rough Castle, the only one now remaining in a fair state of preservation, these are three in number. Antiquaries, obsessed with the preconception that Roman works must necessarily show but a single fosse, doubted whether the Wall of Antonine had not been tampered with by later hands. It is to-day clear that the Roman origin of such forts as Rough Castle need not be called into question on that score, and the further fact that the Wall of Antonine was constructed of earth raised upon a course of flag-stones is also illustrated by the excavations at Birrens.¹ The like results will probably

¹ Exactly analogous were the fortresses constructed along the *Limes Domitianus*, the Roman frontier in Germany. The *castra* there were uniformly walled, but usually with only a stone revetment covering a massive earthen vallum. They were entrenched within one, two, or in a few cases

attend the excavation of other cases of multiple fossation, such as those at High Rochester and elsewhere. At Whitley Castle, in Northumberland, two miles north-west of Alston, the number of the fosses actually rises to seven on one of the four sides of the fortress. It is impossible not to admire the untamable spirit of those "barbarians" who could put their conquerors to such labour for the protection of their own persons.¹

Within the narrow walls of a Roman station was packed all the human machinery of a community self-contained, self-governing, and for the most part self-supporting. Whatever might be the case in the open country around, within the walls the population was dense indeed. There are still to be found in Italy little towns of the precise Roman plan, which, at any rate on those soils where the Latin tradition was most firmly rooted, maintained itself far down through the centuries. Perhaps Old Bordighera² is as accessible a parallel as can well be found—a fully-developed hive of humanity, with its churches, municipal offices, shops and workshops and dwellings, even its miniature *forum*—the *piazza*—of a dignity oddly out of proportion to its size, all packed

three fosses. There were no subsidiary valla, either between the fosses or without them. One of these *castra*, at Saalburg, has lately been "restored" at the Emperor's orders. See a descriptive article in *Archæol. Journal*, vol. lxi. (Dec., 1904).

¹ At Newstead, Melrose, there have been discovered the traces of certainly two, probably three, and possibly four, reconstructions of the station, with slight variations of the plan and of the defensive works. With each successive reoccupation the strength of the defences would seem to have been increased, the last presenting a massive wall of masonry covered by three of the ditches now recognized as a common feature of Roman stations in dangerous localities. Yet the station of Newstead seems to have had an intermittent existence of less than 150 years.

² It is not suggested that Old Bordighera is itself a Roman foundation, albeit standing immediately upon the Roman coast-road from Genoa to Marseilles. It is apparently not older than the days of the Genoese naval power of the twelfth century. Its precise area is 13,300 square metres, and its population 1500 souls.

away with marvellous nicety within a parallelogram of three acres, and hemmed about by lofty turreted and gated walls. Nothing bigger than a coster's barrow could well traverse its exiguous *ruelles*; horsed traffic seldom or never disturbs the mediæval calm of its swarming population, who hang their many-coloured Southern washing athwart the narrow strip of blue sky overhead, carry on at open windows of third, fourth, fifth, and even sixth floors their neighbourly conversations, and up stairs and down stairs, out of doors and in, fill the whole of their city of Lilliput with the muffled music of a life as strenuous as manifold. The houses and walls are taller than they were in Roman Britain, and the style of the architecture is something different, but otherwise Old Bordighera in this twentieth century is pretty much what were a score of towns in the Britain of sixteen hundred years ago.

As the community outgrew its walls these might be enlarged, as seems to have been done at London and Lincoln, the original regularity of plan being thereby sometimes lost. More often the surplus population simply gathered into *faubourgs* without the walls,¹ troubling themselves less and less about orderly plan as the *Pax Romana* became more and more a reality, and strictly military considerations of less and less importance. So the ground adjoining the southern side of Roman York was thickly covered with houses, temples, baths, and tombs. In pacific districts there would probably in every case gather a non-Roman town about the Roman fortress, for the presence of the garrison implies an attendant army of civilians—servants, artisans, merchants, and so on—to supply its wants. It is surprising how quickly a camp

¹ The term *procestrium* is applied to such annexes, when provided with their own defences linking them up with the main fortress. Both Ardoch and Birrens show remains of such annexes, and so do many, if not most, of the larger stations of southern Britain.

develops into a town to-day, and the causes being the same in Roman times, without doubt the results were the same.

Those Roman towns which do not show the theoretical regularity of plan must be explained by supposing that in such cases the invaders had merely occupied the whole or part of some existing British town, subordinating their own theories to existing facts, or to topographical conditions which interfered with those theories. Thus Roman Bath was pentagonal, the site at Bewcastle an irregular hexagon, and on the Erming Street near Chesterton stood a Roman town of polygonal plan, while Uriconium (Wroxeter) was oval in circuit. British towns were in very many cases of enormous extent, defended by lines of earthwork constructed without regard to any ideals of regularity; and frequently the Roman was content to occupy and fortify but a fraction of the area covered by the native town. Thus Roman Colchester occupied a mere corner of the spacious area of British Camalodunum, and the same fact is illustrated by Verulamium (St. Albans), Lincoln, and Chichester. The most familiar example of the Romanization of a complete British site is that of Silchester (Fig. 111), where the Roman walls follow the outline of a slight plateau, and include an area of 100 acres surrounding a forum 100 yards square. The walls are backed with earth to the depth of many feet, but whether this material represents the vallum of some original British stronghold is at present indeterminate. The general plan of the Roman town, which was apparently never a military station, is that of an irregular octagon; but beyond the Roman walls lie the remains of more extensive earthworks—a vallum and exterior fosse, both of great size—which seem originally to have surrounded the whole, save on the southern side, where the swampy character of the ground rendered further defences needless. The Roman passion for uni-

formity provided the usual four gates, and as far as possible the usual chessboard arrangement of streets. The north-to-south main thoroughfare was successfully managed; the other, from east to west, shows towards the middle of the town a sharp double bend of some 250 feet.

If the recorded names of the towns of Roman Britain are to be trusted, it was seldom that the new-comers



FIG. 111.—SILCHESTER.

created a new town upon a new site. Of the 113 towns enumerated in the *Itinerary of Antoninus* only the smallest fraction bear non-British names. Even if we include such hybrids as *Cæsaromagus* and *Durolipons*, there are but thirteen, while of those which bear purely Latin names the number is exactly seven, or one in sixteen. There were, of course, very many towns which are not mentioned in the *Itinerary*, but it may be taken

as certain that amongst those unrecorded the proportion of Roman to British foundations was not higher. It may be taken as certain also that, wherever the name is of British form, the Romans found some sort of native settlement there existing, adopted the site, and Latinized the name. The fact illustrates very forcibly the truth that the laws which govern the growth or decline of towns are little influenced by changes of Governments. The Roman, looking about at first only for strategic points to serve as bases for further operations, looking about presently for others in which to centralize his administration and organization, pitched with scarcely an exception upon sites already chosen by the Briton; and when finally military and political considerations were superseded by commercial, the man whom he had styled a barbarian was again before him. The facts need not be laid to the credit of our barbarian forerunners; they were the inevitable outcome of certain definite laws referable in the ultimate to nothing more abstruse than physical geography. Physical conditions regulated, then as now, production or the lack of it, that is, demand and supply.

Physical conditions determine also the channels through which demand and supply meet, that is, the trade-routes; for these depend upon the position of hills and passes, fens and forests, fat land or waste, rivers and harbours. Strategy is reducible to the same elementary factors. And these factors are before and beyond conquest, which can modify them but slightly, if at all, and only in the course of long years. Whether Britain was Celtic or Roman, tin was still to be mined in Cornwall, to be transported along the most convenient road, to be shipped from the most convenient port; the Gwent was still a kindly soil of unchanging fertility; the first possible ford of Thames was still to be found at the same spot, whatever the name of it may have been; and along the great chalk-ridge of

the Chilterns must still be carried the commerce of east and west. With such facts not even the Cæsars could interfere. Their scheme of administration, like their military system, was of course far different from any that had ever entered the head of any British prince. To the Roman, Britain was firstly a unit, to be organized accordingly under one central authority at York; secondly, a province amongst many others, to be brought into similar dependence upon the centre-paramount in Rome. But here again he could do little but endorse existing facts. Caer Evrauc had been a political centre before his time; he continued it as Eboracum, only in an extended sense. Caerlleon and Caerwent had of old been frontier fortresses; they remained so under the new names of Deva and Venta Silurum. Dubrae continued to be the port of communication with Gaul, Calleva Attrebatum was still the meeting-place of traders, Aquae Sulis carried on the traditions of Caer Badon as a health resort. Military strength and political importance might be greater than of old; Dubrae might be busier, Calleva more prosperous, Aquae Sulis more frequented; but radical change there was none. The life of each community went on without interruption, maintained by the same forces which had first created it. It may almost be taken as an axiom that, wherever there sprang up a Roman town of importance, there or close at hand must have stood a British settlement, and *vice versâ*. In scores of cases the evidence of the existence of both communities has been found upon the same spot; in many more the tradition of both remains, although it may not yet have been proven by archæology. At Colchester and Verulam, at Silchester and Bath, the *vestigia* of both are still plain to see. In very many instances, perhaps in most, the names and the sites of both are entirely lost, all the efforts and guesses of the antiquaries notwithstanding. If there is one problem more elusive than the recovery of a lost site, it is the recovery of its lost name.

On the Fosse Way, about midway between Leicester and Lincoln, the *Itinerary* places the Roman station of Margidunum. It lay astride the road, between Bingham and East Bridgford, and although to-day its site is scarcely to be recognized by the most keen-eyed, within the last century there was still standing a fragment of its walls in what is now called Castle Field, a few yards eastward of the road; and in old tithe-deeds occur at the same spot the names of Aldwark¹ Field and Burrow² Field. Within and about the lines of the old walls, which formed an approximate square, the soil is littered with the usual broken pottery and *tesseræ*, and from time to time have been found Roman keys, skeletons, a pot of coins, and all the customary rubbish which the Roman left behind him. The name of Margidunum is unquestionably a British name under a Latin disguise, so that here or hereabouts we may suppose to have stood a British town. Nothing, however, has as yet been found to determine its exact position. Some years ago the writer was driving along the Fosse from Newark on a morning of early August. The harvest was late that year, and right and left the uncut corn stood tall in the level fields, and under the glare of the sunlight the shadows made by unsuspected inequalities of ground stood out among the corn as in a photograph. There to the left, in a field adjoining the road a mile or so north of the Roman town, could be distinctly seen the regular curve of an unrecorded circular earthwork. It was too distinct to be an illusion, so distinct that the other occupant of the dog-cart, himself no archaeologist, at once recognized its outline. To examine it more closely at the time was impossible. He had perforce to leave it, and though he has since returned more than once, he has never seen it again. Sometimes

¹ *I.e.*, Old-work, the old fort. Contrast Newark, the new fort, some 10 miles away.

² *I.e.*, Borough, Bury, always a tell-tale name.

there has been no sunshine, sometimes no suitable crop upon the ground, and the will-o'-the-wisp eludes him still. But he likes to fancy, most unwarrantably perhaps, that once he looked upon the very site and shape of that lost British town which gave away its name to Margidunum, and some day he will once more try to hit again that happy combination of requirements—a sunny day, the growing corn, and a high dog-cart whence one has a comprehensive view of one's surroundings.

Should anyone else feel drawn thus to "Trace the long shadows o'er the grass," it may be added that in the immediate vicinity, a few hundred yards east of the village of Bingham, he may see the site of the mediæval village of that name, and trace with unusual ease in the grassy surface of "Crow Close" its narrow lanes and walls and foundations (Fig. 183). It is not every day that one can find within one square mile or so a Roman and a mediæval site, let alone a Celtic one as well—possibly.

The stubborn continuity of towns should be borne in mind in any attempt to recover the lost stations of the *Itinerary*. A very large proportion of the known Roman sites in Britain are important towns to this day; a score of names at once suggest themselves, from Dover to Chester and Carlisle, from Wallsend to Exeter, from Lincoln to Caerwent. The same causes have worked to the same results in modern times, in the Romans' day, and in the years before the Romans came. But, on the other hand, certain new causes have worked in other cases to break this obstinate vitality, so that not only has the last fragment of the Romans' work vanished from many a site, but the site itself has, figuratively speaking, become a dwelling-place for the owl and the bittern. These new causes, bound up as they are with the whole history of the country, cannot be discussed here. It is enough to say that we are living in modern times, whereas the Roman and the Briton belonged to another era; and whereas Briton and Roman

were, so far as regards those causes which make or unmake towns, on very much the same level, the modern world has been put upon a totally different plane by new manners and new methods, new developments of science and of commerce, new means of production and exchange and communication, new departures in centralization and distribution, in a word, by the Industrial Revolution. But that revolution was scarce dreamed of even four centuries ago; and there is in many ways a greater difference between the England of to-day and that of 1500 A.D. than between the England of Henry VII. and the Britain of Antoninus.

Certain more visible causes of change are to be found in those physical changes which the centuries have brought about. That steady erosion of the coast which has at long last called forth a Royal Commission has been going forward ceaselessly, and at different points the land-levels have been rising or falling with infinite slowness. Bradwell—the Broad Wall—on the coast of Essex, preserves the memory, but little else, of the Roman Othona, once a coastal fortress of the same dignity as Burgh Castle and Pevensey, and the Roman Portus Adurni is probably under the waters of the Channel. But these are extreme cases; in such slow movements, as a rule, a millennium and a half make little discernible difference. Such differences as are observable are as frequently of the reverse kind. Stutfall Castle is no longer a sea-port, no Cæsar of to-day could beach his ships at Lynne, Burgh Castle no longer lies upon an arm of the sea, and a score of petty rivers which were navigable to the vessels of the Roman time, have long ceased to bear any keels at all. But to those towns which had been called into being by the older conditions, the retreat of the waters was as fatal as was their advance to other towns. They too died, not overwhelmed, but quietly starved, and their doom was but a more lingering agony. There are even now scores of

towns of far younger date which are sinking down through the same stages of long decay—such towns as Walberswick and Aldburgh, Romney and Rye and Winchelsea.

But man himself has been, and still is, a far more speedy and ruthless agent of destruction than either natural or economic laws. If he has spared here and there one monument of the past, it is but to emphasize, as it were, the extent of his ravages elsewhere—the strength and the dignity and the number of the many that he has destroyed.

It is not likely that all Roman stations were fortified on the same imposing scale ; it is certain that their fortifications were not in all cases maintained in their original efficiency. Peace is detrimental to the works of war ; and wherever the immediate menace of war was removed, the tendency was to allow the defences to fall into decay. Only where and while danger threatened would steps be taken to keep them in good repair. Along the Wall such danger was a constant and unquestionable reality¹ ; so it was, in a less degree, along the Saxon Shore ; and herein lies the reason why the latest and the strongest, and incidentally also the best preserved, of our Roman fortresses lie in those districts. They marked the vulnerable portions of the province in the later years² of the Roman occupation, and for that reason they were kept permanently garrisoned and in first-class repair, whereas elsewhere, and throughout central Britain in particular, even the towns which had once been most strongly fortified passed gradually out of the military into the commercial or the merely residential state, and ceased to be fortresses at all. The inland counties have nothing at all to show like

¹ Prof. Haverfield has emphasized the fact that only at Corbridge and at Carlisle has there been discovered any trace of civilian life along the entire course of the Wall.

² Parts at least of the fortifications of Anderida (Pevensey) appear to date from the reign of Honorius, who succeeded in 395 A.D. ; for recent excavations have brought to light bricks bearing the stamp HON . AVG . ANDRIA.

the forts of the Wall and of the Saxon Shore.¹ In all probability their defences were neglected, if not actually dismantled, long before the coming of the Saxons. In almost every case the town had outgrown its original walls, but only in exceptional cases were new walls built.

For many years after the desolation of Britain by the Saxons, Time was left to complete the ruin which fire and sword had begun. And of all enemies Time, or, to put it more prosaically, neglect, is the most deadly. Those years during which the site of every Roman town was given over to the devils wherewith the Saxon's imagination peopled it, must have done damage frequently so extensive as to defy repair.² And when at last in his turn the Saxon took to building in brick and stone, slowly abandoning his ancient traditions of earthwork and timberwork, he directed his earliest efforts, not to walling his settlements or to erecting castles, but to the building of churches and monasteries; and on every hand the ruins of the old Roman masonry furnished him with abundance of material for the trouble of carrying it. There are dozens of churches in England, the earliest portions of whose fabric is of Roman materials³ relaid by the Saxon or the

¹ The distribution of the Roman garrison illustrates this. The original army of occupation, exclusive of auxiliaries, was but four legions, and of these one (*legio* ix.) disappeared very early. The remaining three were quartered, two on the Welsh Border at Caerlleon-on-Usk (*legio* ii.) and at Chester (*legio* xx.), and one at York (*legio* vi.). The seventeen fortresses of the Wall, and those of the *Litus Saxonicum*, were all manned by auxiliaries. [This distribution of the forces, though not invariable, was at any rate typical, and is significant of the condition of various parts of the island.]

² Mrs. E. S. Armitage and others, however, believe that this view is wrong—that the more important towns (such as London, York, Winchester, and Canterbury) were continuously occupied by the Saxons.

³ The earliest missionaries amongst the pagan Saxons had a fondness for making their headquarters upon deserted Roman sites (*e.g.*, St. Fursey at Burgh Castle, St. Cedd at Othona), whether to demonstrate their own power to defy the imagined devils haunting such sites, or because the terror of the said devils was something of a guarantee against molestation by human beings quite as formidable. As Christianity extended the former reason no

Norman. There may well have been hundreds. And it is certain that the materials found so serviceable for ecclesiastical purposes would presently be used as readily for secular purposes. The Saxon, was as a rule, but a poor mason, and his churches speedily fell to pieces. When rebuilt it was by the Normans, men whose piety, late born, was all the more fervent, and took therefore a more costly form. Scorning to use yet again the old material the Normans demanded new stuff, the more so as they had now learnt how to quarry and square their own. As the Coliseum furnished a quarry out of which were built half the churches and palaces of mediæval Rome, so the Roman buildings of England were the quarries of later generations. The Saxon took the Roman's bricks and stones as he found them; the Norman rechiselled them, or broke them up for rubble.¹

doubt held good, while the ruined walls and ramparts offered some means of defence against violence (*e.g.*, of the Danes); and, moreover, such sites furnished the requisite material upon the spot. There are churches within Roman fortifications at Tasburgh and Caister St. Edmunds in Norfolk, at Stowlangtoft and Old Minster in Suffolk, at Ilkley, at Caerhun in Caernarvonshire, at Llandovery, and at Holyhead. St. Cedd's Chapel at Bradwell stands on the foundations of one of the gateways of Roman Othona. There was a chapel within the lines at Ardoch. Where churches are found within works of pre-Roman date (*e.g.*, in such ring-works as Cholesbury and West Wycombe, and at Knowlton, Dorset) there was often no building material to tempt the builders, and the choice of such a site may have been determined by the desire for some protection. Within the great camp of Chisbury, near Bedwyn, Wilts, stands a ruined chapel of St. Martin, built, perhaps, in expiation of the terrible slaughter here in 675, when Wessex fought a drawn battle with Mercia. In some cases there was perhaps a more or less conscious feeling that the spot had once been consecrated to religion. Many modern churches thus perpetuate the holy places of paganism, *e.g.*, Le Mans and Chartres in France, and, if tradition speak true, St. Paul's in London. The church of Yspytty Cynfin, near Aberystwyth, is said to stand within what was once a megalithic circle, and there are many other and surer instances. See also p. 593, note.

¹ The tower and much of the body of St. Alban's Cathedral are built of Roman brick from Verulamium, and there are many less well-known instances. At Ickleton, Cambridgeshire, the columns and capitals of Roman buildings have been embodied in the church. Widford Church, Glos., occupies the site of a Roman villa. At Lyminge, Kent, the ruins of a Roman villa have

When masonry was once more utilized for secular building, one of its earliest cares would be to construct or reconstruct the walls of towns; for, as has been said, the law of continuity did in the long run assert itself in very many cases, and the long-neglected Roman sites took a new lease of life. Here again the old materials were all too easily used, whether to repair the old or to build the new, so that the very revival of the town spelt in most cases the final destruction of such traces of its Roman phase as yet remained above ground. In some instances the old walls were embodied in the new, as at London, Colchester, Lincoln, York, Bath and Chester. At Lincoln one of the Roman gates—the Newport Arch—still does duty. But in most cases the Roman work served simply as a quarry, and seeing that, ecclesiastical and military buildings apart, there was very little mason-work done until the later Middle Ages,¹ the supply was fairly

been rebuilt as a monastery, and the Church of St. Mary stands upon part of the Roman foundations, its windows turned with Roman brick. So with Boxley Abbey, near Maidstone, and Bosham Church, Sussex. It is almost impossible to avoid the conclusion that the earliest Saxon builders took not merely their materials, but their designs also, from the Roman remains around them, *e.g.*, the round arch and the flat pilaster. There are certain very ancient churches in Italy, manifestly constructed out of Roman materials on Pagan sites, and as manifestly showing many of the most characteristic features of so-called Saxon architecture. The Church of San Pietro, in Old Ventimiglia would, in England, be accounted a superb example of typical Saxon work.

¹ Hurstmonceux Castle, Sussex, and Caistor Castle, Norfolk, both built *circa* 1440, claim to be amongst the earliest *large* buildings to be built of brick, when that style of building was at last revived after 1,000 years of abeyance; but there are several still earlier examples in East Anglia, *e.g.*, Little Wenham Hall, Suffolk, and another in Kent, at Allington Castle, both of which are thought to be of the thirteenth century. It is to be remembered that, although the use of bricks was for a long time discontinued, there is no reason to think that tile-making ever ceased. Fragments of thin red tile may be seen embedded in the mortar and masonry of many churches of the earliest date, but they have nothing to do with the Romans, to whom they are proudly referred. The genuine Roman tile was rather a brick of exaggerated length and width, vastly more robust than the thin pantiles which continued throughout the centuries to be the usual material for roofing.

adequate. With the revival of brick-making and the larger ambition of Elizabethan builders, who were no longer content with second-hand materials, the few remaining ruins of Roman date had a brief respite, until they were found to be useful as road-metal. That utilitarian sense which could not spare Avebury and Stonehenge and such tough monuments, was not likely to keep its hands off less impressive and less obstinate ruins of brick and mortar.¹ In most cases there remains visible not one stone upon another, and we owe our knowledge of the existence of many Roman town-sites to the merciful accident that the mediæval builders were content to build over the Roman foundations, not taking the trouble to grub them up.

Such exceptions as Burgh Castle and Pevensey are explained by the fact that here there was no continuity.² Burgh Castle has been deserted from Roman days to the present time; its place was taken by Yarmouth. Pevensey was similarly superseded by Hastings. In each case the new site was too far away to make worth while the labour of hauling material from the old one. Moreover St. Fursey's "noble monastery," which he built upon the site of Garianonum, though utterly vanished now, would in its day prevent the spoliation of the walls which formed its precinct; and the timely interference of Robert Mortain rescued Pevensey by converting it into a Norman castle. Similarly Porchester (Fig. 130) was saved by the rise of Portsmouth, Hard Knot Castle by the remoteness of its position, and most of the fortresses of the Wall by their lying within the debatable land of the Border, where the

¹ At Slack (identified with the Roman *Canibodunum*), immediately west of Huddersfield, the walls of an old farmhouse are largely built of flue-tiles, &c., from a Roman building.

² As being purely military foundations, built to meet a definite but transitory danger, these towns of the Saxon Shore naturally vanished with the danger which had called them into being, *i.e.*, when the Saxon tribes had made themselves conquerors.

age-long activities of raiders and rieviers rendered impossible the rise of any towns at all—made impossible, indeed, the growth of any population to speak of.

If fortress and town have been so easily and so entirely obliterated, the disappearance of any smaller constructions of the same date was necessarily still more rapid and complete. Villas, relatively slight buildings even in the most substantial cases, naturally fared badly. Everyone knows how speedily mere desuetude plays havoc with an empty house; the added violence of man rendered impossible their escape, especially as they were largely built of wood. The foundations, of course, were of brick and stone, the lower story of the same materials with more or less of timber; but timber and plaster alone seem to have been the usual materials for the upper structure, the whole being roofed with tiles of red earthenware, stone, or slate. In very many cases the remains show plainly that their destruction was by fire, and fire would on such buildings do its work very thoroughly. If by chance the lower walls were spared for a time, their relative slightness would ensure their ultimate demolition. They were easily broken up, whether by time or by the *démolisseur*. The villa at Ravenglass, of which the walls still stand in parts to a height of eight feet, is a notable exception. In most cases nothing at all would be left but those substructures which lay too deep to interfere with the plough—the actual foundations, the floors, and the heating-chambers beneath the floors. These are the remains which are most frequently brought to light, and even these are mostly mere ruined fragments, bearing unmistakable traces of purposed destruction. Still, tessellated pavements and hypocausts are things which cannot well be removed intact, while they are of little use as road-metal; so that in cases where the last stone of the foundation walls has been grubbed up, patches of flooring are still occasionally found *in situ*. But very rarely, indeed, is there left anything

which in the smallest degree breaks the dead level of the surface soil. There are numberless spots where low mounds and shallowing trenches bespeak the sites of vanished buildings, old manor houses and monasteries with their walled precincts and terraced gardens and fish-ponds, or even whole villages of the later Middle Ages which have yielded to the visitations of the Black Death or to the slower pressure of altered economic laws ; but rarely, if ever, is there the slightest outward mark to betray the spot where sleep the ruins of the most extensive of Roman villas.

For the vast extent of many of these villas is one of their most striking features, and may easily create a false impression of the civilization and the social system to which they belonged. The villa, the larger sort of villa, at any rate, was less a private residence than a complete colony gathered about a private house : that was its character in Italy, and there is plenty of reason to think that it was even more so in Britain. It was the Roman equivalent of the later day castle of the feudal baron, with the surrounding cluster of his retainers' meaner dwellings. A country residence, from Roman times down to the eighteenth century, had of necessity to be self-supporting. It was not possible then, as now it is, to satisfy every want at shortest notice by a visit to the shop or the market town, or by a letter to the capital. Such shops as the towns could boast of catered merely for the small needs of the town's immediate population, and of this but a very small fraction was well-to-do. There were no great emporiums, stores, or universal providers. What was required in the villa was mostly produced upon the estate, and what could not be so produced was probably provided by the regular or irregular visits of those travelling traders, whose representatives, the tinker and hawker and pedlar, have all but vanished out of the land to-day, albeit they were numerous enough less than a century ago. The

great manorial estates of the Middle Ages themselves furnished almost everything that was needed in the way of provisions, and whatever the estate produced in that kind was consumed at home, the lord of the manor visiting it with his friends and retainers once a year or so, expressly to eat up the year's harvest of crops and meat and game. It would never have occurred to anyone to make merchandise of any of the produce, for the simple reason that there was no market for it. Other people of means grew enough for their own requirements, and people without means cannot buy. The domestic economy of the wealthy Norman, of the Saxon lord, and of the Roman who dwelt in a villa, was the same. Each grew his own corn, ground it in his own mills, baked it and ate it at home; each reared, fattened, and killed his own poultry, mutton, beef and bacon; each grew and spun his own wool, planted and gathered his own fruits, brewed his own beer or whatever other drink was in fashion, bred and fattened his own venison, fish, partridges, snails, or what not. His staff of villeins, serfs, or slaves included all the needful artificers in stone, wood, metal, or leather—masons and carpenters, saddlers and blacksmiths—as naturally as it included ploughmen and gardeners, hedgers and ditchers, millers, grooms, and cooks. The estate, whether manor or villa, was to all intents self-contained and self-sustaining. Excepting in such items as the produce of the mines—iron and lead and tin—and what other few articles Britain produced for export as Government monopoly or tribute, there was no trade save in the superfluities of life; and a trade which is confined to luxuries can never be an extensive one, though it may easily be profitable to the few who share it.

Realizing this, one marvels the more at the time and labour expended by the Romans upon their roads in the outlying provinces of the Empire, until one remembers that certain great military Powers of the present day display an almost equal energy with as little apparent

utility. There was no more traffic, in the modern sense of the word, upon the grandest of Roman roads in Britain than there is to-day upon many hundreds of miles of superb highways in provincial France, or on the interminable military roads of Russia, which have no more relation to the social economy of that Empire than had Burgh Castle or Pevensey to the social economics of Britain.

There was therefore no necessity for any high road leading to, or even very near to, the villa. A road of some sort there naturally was, but probably not often a high road. There was none to Pliny's villa at Laurentum,¹ yet that was a very pretentious country-house indeed, was only 17 miles from the capital of the Empire, and was the favourite residence of an official of very considerable importance. The Roman in the country took no more trouble about the approaches to his "place," probably very much less, than did the owner of any country-seat in modern England before the advent of the motor-car. The existence or non-existence of a Roman road hard by has little to do with the distribution of Roman villas.

Of the host of underlings required to supply the owner's various needs, many would be housed in the meanest of huts in the vicinity, erections on too humble a scale to leave any traces behind them.² But those of

¹ Two highways led *near* to it, but the villa itself had to be reached by "sandy lanes, difficult going for a carriage, but easy enough on horseback," the shorter 3 miles long, the other 6 miles. See Pliny, *Epistles*, ii. 17. The great man's apologetic description of the amenities of his "little place" gives a charming idea of the spaciousness and luxury of what a Roman of the period (100 A.D.) deemed merely "a useful sort of house, and not expensive to keep up." One has to turn to Bacon's *Essays*, "of Building" and "of Gardens," to find in an Englishman of "the spacious times of great Elizabeth," or somewhat later, the like combination of magnificence and humility.

² These huts were perhaps precisely similar to those of the natives of the period before the Romans' coming. We know that such huts remained in use in Roman times. At Pevensey Castle have lately been opened up the remains of huts which are thought to have been the temporary dwellings of the workmen employed upon the building of the fortifications of Anderida.

superior class, and such as attended to the master's person, were accommodated within the great house, as now they are. The only difference was that, as usual in a society founded upon slavery, the number of the servants was vastly greater than under modern conditions, and this in some measure accounts for the enormous size of many villas. The wealthy man in Roman, as in Norman and Plantagenet times, advertized his own importance by the numbers of his household. If the indoor household has greatly shrunk under modern conditions, the outdoor staff has all but vanished, although one might still find within memory in the remoter parts of the northern counties isolated homesteads which maintained about them every kind of artificer of more immediate importance, *e.g.*, their own blacksmith and their own joiner. But the industrial revolution has mostly swept away such survivals of the older order of things.

Like "country places" of the old-fashioned kind,¹ Roman villas were, as a rule, but thinly scattered over the soil, for their owners went into the country for the country's sake—for quiet and sport and privacy. It is exceptional for the *vestigia* of villas to be unearthed save at long distances apart, but exceptions do occur, and naturally some parts of the island were more sought after than others. Around the shrunken remnants of Somerton, once the capital of Somersetshire, lie or lay the ruins of a dozen or more of villas of various sizes, one of them covering as much as $2\frac{1}{2}$ acres of ground. These were all served more or less immediately by the road from

¹ The house—commonly a mean one—built to give to its owner, who has no other interest in the country, the chance to breathe country air once a week, or even to sleep all the year round beyond the reach of the town, is an exclusively modern development. In the Roman time, and thence onward to the nineteenth century, the house and the land were inseparable; the one was unthinkable without the other. The Roman villa was simply the head and centre of an estate larger or smaller, and estates of any size were further subdivided amongst farm-houses of less dignity than the master's villa.

Ilchester through Street and Walton—all tell-tale names—to Glastonbury. At Pitney, half-way between Somerton and Langport, was a particularly fine one with very beautiful mosaic floors, all of which were wantonly ploughed up only so lately as 1836. *Auri sacra fames!* About Bath, again, have been discovered the remains of some thirteen or fourteen villas within a radius of 5 or 6 miles. This might seem at first sight to imply a dense population of country gentry.¹ Undoubtedly it was very much denser about Bath, the one fashionable watering-place of all the Roman society in the island, than elsewhere it was, but estimated by modern standards it cannot be called dense at all; ten times as many country houses, even if of large size, could scarcely overcrowd an area of 25 square miles. It is clear, however, that the Romans were fully alive to the abiding charm which still clings to the pleasant garden-county of the west; indeed, Roman remains are said to have been found in upwards of one-third of the 500 parishes of Somersetshire, but not, of course, the remains of villas.² Gloucestershire was another favourite residential county, and so was the high land of north Lincolnshire near the line of the Erming Street. As one travels northward, the number of villas becomes rapidly fewer, for the country was less settled.³

¹ There have been recorded in all between fifty and sixty sites of Roman villas in Somersetshire. But some of these are dubious, and, on the other hand, the county is a large one. Most of them lie in the eastern and northern portions of the county.

² Mostly they are surface finds only—pottery, coins, weapons, and such bric-a-brac. Inasmuch as the west country was the very last retreat of the Romanized Britons from the Saxons, before they became finally homeless and barbarized fugitives, it was to be expected that the remains of Romano-British civilization would abound. And, as has been argued in the preceding chapter, that is exactly what, for the most part, these so-called Roman remains really are.

³ The villas at Well near Bedale, and at Middleham on the Ure, claim to be the most northerly of Roman civil remains on the eastern side of England. On the west coast the villa at Ravenglass is more northerly still.

In his choice of a site for his villa one Roman was much like another. He preferred a situation at once sheltered and open, with a fertile soil and a constant supply of the very best water. A southern aspect pleased him best, and whereas he frequently nestled his villa at the foot of a hill, he did not affect the steeper slopes, still less the actual ridge. The Roman building which is said to have once stood within the earthworks of Chanctonbury Ring was not a villa, if only for the reason that there was not room for such a building there. A warm and sunny spot which might remind him somewhat of his native Italy's climate, good hunting and good fishing—plenty of wood, that is, and plenty of water within easy reach—with an absolutely dry situation for the house itself; such were the requirements of his case, and they were more easily found in his time than now. But he knew better than to build on wind-swept moors, amongst the jungle, or too near the fens. Had he done so the ruins of his habitations had perhaps been better preserved than they are; it is because his villas stood invariably upon the choicest of soils that their very foundations have so often been erased, and the ploughshare has completed the ruin which fire commenced.

In popular parlance, "camps" and "villas" include anything and everything that the Roman built. But villas and towns, with their usual accessories in the way of baths, temples, tombs, and theatres, do not by any means exhaust the list of his buildings. Along all the great roads must have stood many less pretentious constructions, such as inns and posting-houses, and smaller dwellings. In some places have been unearthed what seem to have been the foundations of watch-towers, beacons, or signalling-stations. At various points along the greater roads at least were erected miliaries—not so much milestones, perhaps, as monuments to record the date of the road's construction or reparation, incidentally utilised to

tell the distance to the next important town. A few of these are preserved in museums, and the remains of some are still to be found *in situ*,¹ but the great majority have certainly been removed and destroyed, broken up for road metal or built perhaps into neighbouring walls, whence they may yet be disinterred. Many modern bridges stand upon piers laid by the Romans, and without doubt there are many others of which the Roman substructures have not yet been remarked. Roman wells are of frequent occurrence; their carefully laid linings of stone or timber distinguish them from the rubbish-pits which accompany almost every residential site, and which yield some of the best of the treasures recovered by excavation.² In fact, the Roman left behind him all the *reliquiæ* of a civilisation not so very much inferior to our own. Certain other special forms of his handiwork will be touched upon amongst miscellaneous earthworks, *e.g.* dykes, *botontini*, roads and amphitheatres.

Many as are the buried towns, villas, and other Roman remains which have been already traced, there may well

¹ One is the so-called "Imp Stone," a Roman mile to the south of Silchester (its name originated in the letters IMP=*Imperator*, which were part of its inscription); a second is "Joseph's Stone" on Otmoor, Oxfordshire; a third is between Caerhun and Aber, in North Wales; and a fourth is near Borcovicus, on the Wall. High on Bowland Knots, on the line of the Roman road from Ribchester to Overtown, is a circular stone base which may have once carried another miliary. Others are known to have stood near Leicester, Cambridge, Braughing, &c., and yet others are thought to be embodied in mediæval wayside crosses.

² It is said that when the authorities of the South Kensington Museum, desiring to add to their collection of old Delft ware, despatched for that purpose to Holland a representative, he obtained some of the choicest of his finds from old wells which he caused to be cleared out. In Roman days, also, the pitcher went once too often to the well, and such places yield relics in quantities. Some of them, partly because of the abundance and variety of these relics, partly because of their odd construction, seem to have been mistaken by the older antiquaries for *arceæ finales*—those depositories in which the Roman *agrimensor* laid the miscellaneous articles to-day represented by the coins and the copy of the *Times* laid beneath a foundation-stone.

be a hundred more as yet undetected, and it is no absurdity for any one who has the ambition, to hope to make such another discovery to-morrow beneath his tennis lawn, in his orchard, or in his field. The signs are unmistakable, but they require to be sought for with keen eyes. It is too much to hope to find, at any rate above ground, one stone remaining upon another; but so often as the plough breaks up the soil again, the ditcher trenches for a drain, or the navvy digs a railway-cutting, there is the possibility, almost the likelihood, of a new discovery. A few pieces of Roman tile, a handful of *tesserae*, a few fragments of painted stucco, even a mass of oyster shells,¹ may prove to be the clue which shall restore to the daylight and to the map another Silchester. It is not pretended that finds so small *will* lead to such great results, and it has been pointed out that very little value attaches to the evidence of coins, pottery, and similar small and *portable* relics; but whatever the scoffer may say, the genuine enthusiast knows that the very meanest of such discoveries, properly authenticated and recorded, is a certain link in a chain of evidence, long perhaps and all too slender, but not the less continuous, linking up to-day with a yesterday full fifteen centuries overpast.

¹ Quantities of oyster-shells are a well-known accompaniment of the other *vestigia* of a Roman site, though what was their purpose is not clear. At the small station known as Lowbury, in Berkshire, there is a quite phenomenal accumulation of them. They are frequently found, also, accompanying burials in barrows of other than Roman date.

CHAPTER XI

THE TRANSITION

*“And still from time to time the heathen host
Swarmed overseas, and harried what was left,
And so there grew great tracts of wilderness,
Wherein the beast was ever more and more
And man was less and less.”*

THE conquest of Britain by the Teutonic tribes was a protracted agony of more than four hundred years. Whether or no it be a fact that Hengist and Horsa first landed on the shores of Kent in 449, and whatever be the truth about the reasons which brought them hither and kept them here, it is more than probable that many small bodies of immigrant adventurers from the shores of the Baltic had already established themselves in Britain long before that date, and that the south-eastern sea-board of the island was even in the fourth century known as the Saxon Shore,¹ not so much because it was the natural and favourite objective of piratical expeditions, as because it had already received a considerable number of Teutonic settlers. This may be matter of dispute, and the story of Hengist and Ronwen the Fair, may be more than dubious, but it is solid fact that not until 577 was fought

¹ The name embraced the whole sea-board from Pevensey to the Wash. For its security against the pirates were reared—or repaired—the great fortresses at Brancaster, Burgh Castle, Bradwell, Reculver, Richborough, Stutfall, and Pevensey.

the battle of Deorham, which laid Bath in ruins, and brought the West Saxons victorious to the Severn Sea, so severing finally the overland connexion between the Welsh of Cornwall and their kinsmen of Cambria. Admittedly then there elapsed at least 130 years ere the invaders could push their arms across the southern part of the island from Ebbsfleet to the Severn. In the North things moved even more slowly. As Deorham marked the isolation of the south-western parts of the island, so the battle of Chester (607) marked the lopping-off of the north-west, the Celtic kingdom of Strathclyde, and this was just 30 years later than the fight at Deorham. Not till another half-century had passed did the West Saxons reach the Parrett (658), after which King Ina, having fortified Taunton, was content to leave the further conquest of the south-west to the gentler influences of intercourse and law. The freedom of Strathclyde ceased only with the fight at Dunmail Raise in 945. In Cambria the Welsh maintained their independence against Saxon and Norman and English alike until 1277. The Welsh of Brittany, many of them refugees from Britain, were never conquered by force, and did not become even nominally French until the marriage of the Duchess Anne to Charles VIII. in 1483. Everywhere the tale was the same: the Welshmen fought always a losing fight, but they fought it with a stubborn courage which made glorious defeat itself. Whatever other effects may have resulted from their four centuries of contact with Rome, that contact had not made them cowards. The Saxon tribes could scarce boast of one forward step made without cost. Their earliest steps, the proverb notwithstanding, were the easiest, for whereas elsewhere they had to fight inch by inch for their conquests, along the east coast only did they make good their footing with little trouble.

This fact may in part be explained by there being already in that quarter many Teutonic settlers, whose

presence aided the newcomers, but it was quite as much the consequence of physical facts. The east coast of England is mainly a flat land, offering, south of the Yorkshire Wolds, no high ground where the Briton might make a stand. His only refuges here were the forests and the fens, and both were seamed in all directions by streams which gave to the Saxon in his "sea-snake" ready means of access. It was because those districts had so complicated a river-system, such a multiplicity of estuaries to serve for harbours, so many navigable streams to serve as highways to the seafarer, that first the Saxon and then the Dane made their easiest and most complete foothold there.

Excepting the three or four great fights already mentioned, we have but the scantiest details of this struggle of centuries, especially of the earlier part of it. Here and there is recorded an event which can be localized and dated—some isolated landmark standing out clear in the mists of antiquity—such as the sack and burning of Uriconium, "the hall of Cyndyllan the Fair," and the destruction of Aquæ Sulis; but no one knows where was actually fought the great fight of Mons Badonicus (Mount Badon), in 520, albeit it was a victory so dearly bought as to stay for half a century the westward march of those who won it. Not until 577 did they achieve another such advance. On every hand the struggle was as bitter and as obstinate. How was it maintained? By what means did the Britons contrive so long to make a good fight? Where are the *indicia* of their resistance?

With the possible exception of the works known as the Wansdyke and Bokerley Dyke, it does not appear that there is a single known earthwork which can with any degree of confidence be attributed to the Britons of this period. Yet it is difficult to believe that they can have made so obstinate a resistance, and lived so long under the unceasing menace of raid and ruin, without resorting

to some elementary method of defence. They had indeed still the more or less dilapidated defences of the Roman towns behind which to take refuge, and there are cases where these defences seem to have been hastily and unskilfully repaired. But for every fortified town there were many which had never been properly fortified at all, and of those which had been most elaborately walled every one lay upon a trunk-road which invited the enemy's attack, and offered to him the easiest means of approach. Did the Britons do nothing to wall the unwalled towns, or to improve the defences of the rest? or did the inhabitants of the unwalled towns, like those of the open country, merely withdraw *en masse* within the fortified positions? To believe that they did so during the whole of a period so long is as difficult as to believe that they did nothing.

From the discoveries made at King's Scaur has been reconstructed a pathetic picture of the gradual relapse of the fugitive Britons into barbarism. Doubtless the picture is equally true of the Britons of Wales, of Strathclyde, and of Cornwall. Of the unending tale of "Roman remains" brought to light almost every week of the year, a very large number, as has been pointed out, are rather the *reliquiæ* of the Briton—poor odds and ends of the civilization so fast slipping from him, to which he clung pitifully in the hills and holes. It was the British refugee who carried shards of "Samian," scraps of bronze jewellery, and handfuls of ill-minted coins into fastnesses—islets in the fens, long-disused forts upon the hills, even holes in the very ground—whither the most decadent of the *Trojugenæ* would have disdained to fly. In this way came the shreds and tatters of Roman culture into the caverns of Craven, of the Peak, and of the Mendips. But between the last flight to such lurking-places and the first commencement of the struggle there elapsed whole generations. Did the Briton do nothing

during all those years but patch up the decayed walls of his Roman masters, or the yet older hill-forts of his own ancestors, in no case realizing that the new circumstances called for new methods? It is hard to reconcile with such apathy the implacable ferocity of his resistance, and it would seem only reasonable to suppose that many of the earthworks of England were the handiwork of the Britons of this period, at least in part. But it is seldom that anything is forthcoming to support such a theory.

The camp at Hod Hill, Dorset, may possibly be such an one. This (Fig. 112) is a hill-fort of immense strength and very great size,¹ occupying a flat summit (470 feet) three miles north-west of Blandford and some 12 miles west of Bokerley Dyke. A mile and a half to the north-north-west is Hambledon Hill, likewise crowned by a very large camp, the two fortresses together blocking the way westward up the valley of the Stour, which river makes a curve about the western and southern sides of Hod Hill. The latter is fortified by two ramparts of fine proportions, reinforced in places by a third: at some points the inner rampart has a slope of 26 feet above the area within, and a fall of over 60 feet to the bottom of the fosse without; while the second bank, although less formidable, has nevertheless inner and outer slopes of 15 and 30 feet respectively. Where the fall of the ground allows it the third rampart forms a slight parapet to the outer fosse. The contour of the hill gives to the whole camp a fairly regular rectangular plan, and there are four entrances which are ancient.

The north-east gateway (Fig. 65) is a characteristic piece of British work, the ramparts enfilading the path and recurving upon it in the actual entrance. The same recurve protects the south-western gate, which lies nearest

¹ Something under 50 acres. In his article upon this camp (*Archæol. Journal*, lix.) Prof. Boyd Dawkins gives the area as 320 acres, that of Lydsbury Rings as 70 acres. The latter is about 7 acres only.

to the river, an additional vallum and fosse running direct from the gate towards the river to form, perhaps, a covered way. The area of the camp is covered with the

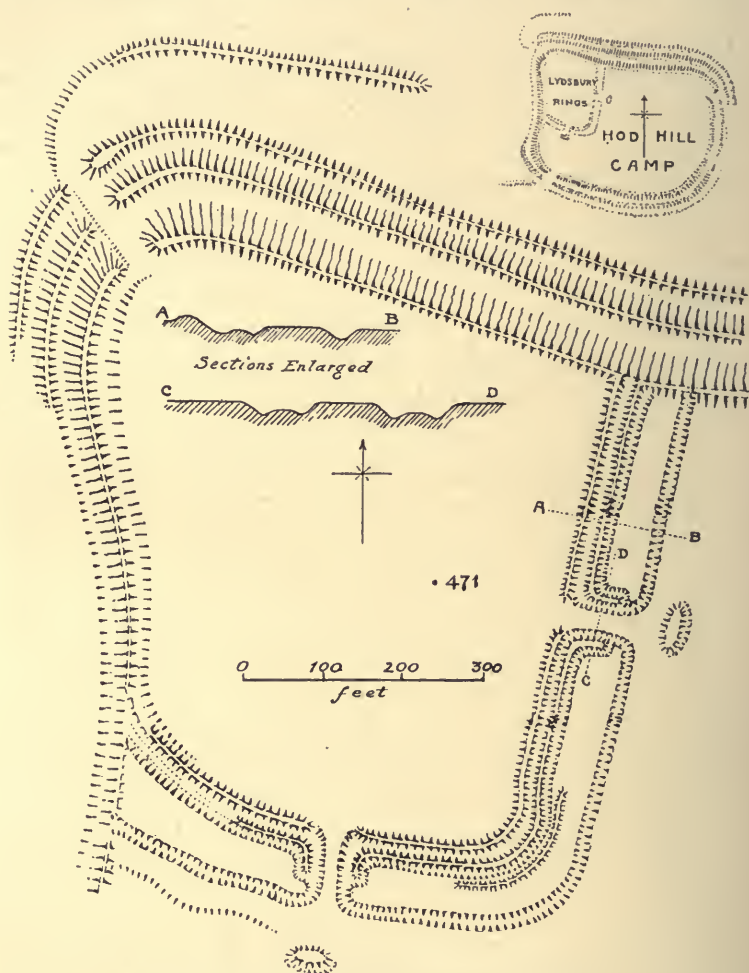


FIG. 112.—HOD HILL AND LYDSBURY RINGS.

vestigia of huts, and excavation has shown that these were occupied in the Prehistoric Iron Age for a number of years, and continued to be occupied more or less into the Roman time, but apparently with a considerable interlude.

There was evidence that pits originally intended for huts and long so used, had subsequently been utilized as burial places, and again reoccupied by living tenants. Such alternations postulate a long time. Whether the earthworks of the camp are in any respect earlier than the huts explored is not yet decided. As they stand they are just like those surrounding a score of similar fortresses in Dorsetshire and elsewhere.

But at the north-western corner of the area is found a secondary line of defences, specifically known as Lydsbury Rings, and enclosing a space of 7 acres. In several ways this work suggests Roman castrametation. The lines are rectilineal, the enclosure is rectangular, and its solitary original corner (south-east) is boldly rounded; while the two contemporary entrances (those which traverse the two sides enclosing the south-eastern angle) are disposed in the regular Roman way in the middle of the sides, and covered each with an outwork of design theoretically correct. Quantities of remains of Roman character have been from time to time found within the area and upon the adjacent slopes of the hill, and a Roman road, running due north-west from Badbury Rings (5 miles) toward Hod Hill, has been partially traced. It has therefore become traditional to regard Lydsbury Rings as Roman work, and as the result of the most recent excavations Professor Boyd Dawkins endorses this view, and further believes the work to belong to a very early date in the Roman occupation, subsequently abandoned, he suggests, owing to the rise of another and more convenient Romano-British town at Iwerne (Ibervio), a little distance to the north.¹

With all deference to authority it may be doubted whether this is the only conclusion possible. In the first place it is certain that the Romans did not usually adopt and adapt the work of native Britons in the piecemeal fashion suggested in the case of Lydsbury Rings.

¹ See *Archæol. Journal*, vol. lvii. (1900).

They may have done so on occasions, but such occasions are very very rare.¹ The only entrance to the supposed Roman camp from the outside world lies in the north-west angle, and has no resemblance to Roman work either in position or in plan. No trace of masonry or Roman foundations has been found within the area or along the valla. Finally, that part of the enceinte which is supposed to be Roman work is unlike other proven examples of Roman castrametation to be found in the South of England: there are three fosses with a wide berm intervening, and two of the fosses envelop the berm on either side of each entrance. The most convincing evidence forthcoming to support the theory that the Rings are Roman work, is the finding of two very early coins in the refuse-pits within the area, and the alleged finding of fifteen others, none later than Trajan, recorded by Warne.² But no excavation appears to have been made

¹ The writer is not acquainted with a single instance in which the fact may be considered certain. Where British camps have been reoccupied at later dates, it was certainly in most cases by others than the Romans. (The case of British sites which subsequently grew up to be Roman towns is not here in question.) The supposed modification of a British camp at Powerstock (Fig. 29) by the Saxons is, to say the least of it, doubtful: there is nothing whatever in the plan of the works there which may not well be Norman only. The Normans not seldom adapted British works, just as they adapted Roman ones. But for the most part the later occupations were post-Norman, and not military, so much as domestic. Reddingwick (Fig. 162) may be a very doubtful case, but there are plenty which are not doubtful; indeed, it is quite common to find dwelling-houses within the lines of British works to-day, and the fashion is of respectable age. Seeing that churches were so often built in such positions (see p. 344, n.), it would be surprising if houses were not so built also. There is a small rectangular work of about one acre within the area of Bury Wood Camp, Colerne, Wilts, a fine promontory-fort of 25 acres; and in Colt Hoare's time there was another, much smaller, within the lines of Soldier's Ring (Fig. 44). In such cases as Eggardon (Fig. 19), and perhaps Cissbury (p. 650), the so-called inner camp was never a camp or a dwelling-place at all.

² The two very early coins are of the reigns of Augustus and Caligula; of the fifteen mentioned by Warne eight more belong to reigns antecedent to the Roman Conquest. There remain therefore only seven specimens dating 43—117 A.D., and the number of all is very small.

across the so-called Roman trenches, and of all the pits within the area four only were explored. The examination therefore has been very partial, and seeing that coins of very different reigns appear to have been in constant circulation throughout the Roman occupation, too much stress should not be laid upon the character of those discovered. Had the camp been occupied, as the coins would suggest, continuously from the reign of Claudius to that of Trajan—*i.e.*, more than fifty years—there must have been discoverable some traces of Roman building of timber if not of stone. As it is, nothing seems to have been found which might not have been brought there by the native Britons, who admittedly reoccupied some of the pits during the Roman time or afterwards. On the other hand, the fortifications are far too elaborate to allow of the supposition that the camp was only temporarily occupied.¹

It is at any rate conceivable that Lydsbury Rings was the work, not of the Romans at all, and still less of the Romans at the very commencement of the conquest, but of the Romanized Britons at a date posterior to the departure of the Romans.² The works are in fact sufficiently like Roman work to suggest that they were raised by a people conversant with Roman methods of defence, while they are sufficiently unlike it to suggest

¹ The rarity of genuinely Roman encampments in Dorsetshire has frequently been remarked. Warne could mention only nine possible instances (including Lydsbury Rings), and of these the majority are decidedly doubtful. He describes Weatherbury Castle, near Milborne Stileham, as having a great resemblance to Lydsbury. It is, he says, more or less rectangular in plan, having double lines of vallum and fosse with wide intervening berm, outcurve of vallum about the entrance, and outlying breastwork before it. His description hardly fits the existing remains (see above, p. 121), in which there is nothing to recall Lydsbury. The plan of the square camp at Cawthorn (Fig. 97) should also be compared.

² That the eastern and southern lines of Lydsbury Rings are later than the other works upon the hill is abundantly clear from the manner in which they cut across the latter at the N.E. and S.W. angles.

that the builders were not actually Romans. They may very well have been Romanized Britons, and the theory that these did occupy an older British fortress and modify its excessive dimensions to suit their requirements tallies quite well with the discovery of Roman or Romano-British remains on and near the spot.¹ In all likelihood there was a Romano-British settlement on the slopes of the hill, occupied perhaps by the very people whose forefathers had inhabited the great fort above. In the days of the Saxon advance it may very well have happened that the Britons decided once again to use the old fort as a garrison-post to watch the valley of the Stour, and as the key to the Vale of Blackmore to the west. But it was far too large for their purpose, and was accordingly modified in a manner learnt indeed from Rome, but altered exactly as amateur imitators almost always do alter their model. The Briton had seen the Roman's way again and again, and he had learnt that the Roman was invincible; but he had not learnt that the Roman, though he made earthworks, did not owe thereto his invincibility. He thought the vallum and the fosse were the secrets of success, and sought to make that success doubly sure by doubling his spade-work. It is a curious fact that the camp on Hambledon Hill, equally valuable as a strategic position, has also been tampered with, its area being cut across by a "lofty irregular vallum and fosse, the object of which is not obvious." It was perhaps just such another attempt to convert the original camp, a vast enclosure upwards of three-quarters of a mile in length, into a fortress more convenient and tenable. When the original camps of Hod Hill and Hambledon Hill were built, they were designed to shelter a whole population

¹ There are hut-circles within the area of the main camp, and the walls of the lesser camp are said to be thrown up over the sites of other such circles. But this fact, if it is a fact, throws no light upon the question whether those walls are of Roman or of Romano-British date.

and their belongings; if the Romano-Briton re-occupied them it would be no longer as towns, but as watch-posts only, and he would naturally wish to reduce their size.

It is quite possible that a similar explanation may account for the presence of transverse banks and fosses in other camps of large size, *e.g.*, at Bindon Hill, near Lulworth, where "the area is divided into three parts by two traverses of great strength"; but on the whole it is remarkable that there are so few examples of camps which are thus divided at all, and very few in which the dividing works are on a sufficient scale to suggest that their purpose was military. If there were constructed any new camps at this period, it is at present quite impossible to say which they were. On the whole the Britons would seem merely to have reoccupied, as occasion demanded, the older works on the hills, possibly in some cases repairing or strengthening their fosses and valla; but it is not possible to show that their long experience of Roman methods, their familiarity with Roman masonry, and the novel tactics and accoutrements of their new enemies, called forth one novelty in the tactics, castrametation, or fortification of the Britons.¹

In point of fact the English invasion, and equally the British resistance, were utterly destitute of organized plan or method. There was no sudden inrush of barbarian swarms in numbers large enough instantly to overrun the entire land and to alter within a year or so its whole character, as was the case in Gaul. Rather this complete and immediate appropriation of Gaul by the Franks, Vizigoths,

¹ The old theory that any approximately rectangular fortification might reasonably be attributed to Romanized Britons is just as untenable as that which wrote down every strictly rectangular entrenchment as Roman. Such camps as those at Hascombe Beeches and Holmbury Hill in Surrey, like Shoulsbury Castle and Hod Hill itself, owe their regularity of form to the hills which they occupy. It is quite possible, but it has not been proved, that the peculiar arrangement of the valla and fosses with wide berms in such camps as Shoulsbury Castle may belong to the Romano-British period; but it is found in other instances where there seems to be no reason to think the work to be of so late a date.

and Burgundians, only served to cut off Britain from the one influence which had given unity to her peoples, leaving the land to be slowly devoured at their leisure by the Baltic pirates. On the side of the latter there was no hurry, no definite plan, no need of either. They came in twos and threes, as each was prompted to try his fortune beyond the seas, and no large bodies of men were deliberately thrown into the island to proceed forthwith to its systematic reduction. It was rather analogous to those leisured and irresponsible occupations which have since carried into India, Canada, Africa, and Australia the sons of the Saxons, Jutes, and Angles, forbears themselves of "the legion that never was 'listed,'" hewing out each for himself a new patrimony and building for his race new empires, without knowledge or thought of such high mission. The diversity of the participant tribes, the multiplicity of their leaders, the manifold points successively or simultaneously attacked, all bear this out. The English, then as since, simply "muddled through" to a great achievement.

The invaders again were men of the sea and shore. They had no love of the hills, and at the outset no reason to grasp at the hills. They found land enough for their immediate requirements, and more than enough, along the shores of seas and rivers. As fresh bands of settlers arrived, these perforce passed further along the coast or further up the rivers. But the uplands were still left to the Britons: they were merely driven back to the areas which they had occupied before the reclamation of the lowlands.

If the invaders were without organization, so also were the natives. There was something in the government of Imperial Rome which tended to paralyze all national spirit without creating a genuine imperial spirit to replace it. Under Roman rule the Britons had forgotten how to act even in partial or momentary unison. That they made a better fight than did the Gauls is little to their credit, for they were not faced with the same tremendous

inrush of enemies. Indeed the very immensity of the host which poured across the Rhine into Gaul, or over the Pyrenees into Spain, was more calculated to awaken a national feeling, to provoke a national resistance, and to call forth a national leader, than was the lingered, piecemeal, incoherent advance of the Saxon tribes into Britain. The very lack of plan and promptitude in their inroads took the heart out of the Britons' resistance. It provoked carelessness, and took fresh advantage of the carelessness which it provoked. The forces of the Britons were distracted by the multiplicity of the attack, their watchfulness and energy disarmed by its leisured character. Against a single force acting under one command and conducting its operations from a single base according to a single plan, it would have been possible to make an organized and calculated resistance, to mark out and fortify new frontiers, to construct regular lines of defence; but against this mosquito-swarm of hap-hazard and ubiquitous assailants, any such methods were out of the question, particularly with a people of Gallic temperament. They "let things slide" further and further, and with each fresh reverse there came, as usual, aggravated indifference. When at last the awakening came, as tradition says it came, in Arthur's time, it was too late. The Britons might seek to organize their forces now, but the opportunity was past. They were hemmed in upon every side, and the invaders had swelled to numbers against which resistance was hopeless. The state of things is reflected in the meagre facts recorded; the later steps of the Saxon advance were bloodily contested indeed, and separated by long intervals of quiescence, but the advantage gained by each fresh encounter grew steadily greater. Badon might give little profit to the victors, but Deorham gave much, and another fight more brought the Saxons to the Parrett.

How far the struggle went towards exterminating

the British population, and how far the Saxon was responsible for such extermination, are matters of dispute.

- Probably the Briton was more to blame for it than the invaders, who presumably preferred a live slave to a dead foe.¹ Without doubt a large number of the women were saved alive, while the men, refusing to become slaves, were either slain in battle or driven into hiding. They fled to the fens, to the hills, into Cornwall and Wales and Brittany, but the Saxons took no systematic steps to hunt them out, so long as they kept their distance. It is thought that there is a large element of British blood in the people of the Fens to this day, as there certainly is in the West country. Doubtless it was open to the Britons to stay if they chose, and being a proud race they mostly preferred to go. But the Saxons merely ignored them: what they had come to Britain for was rather the Briton's land than his person.

The fate of the towns illustrates the same view. No one knows how London died, yet die it assuredly did. It was apparently isolated and left to perish rather by isolation than by immediate violence. The like fate befel most of the Roman towns. We hear of the storming of here and there a city—Anderida, Aquae Sulis, Uriconium—but mostly they passed away unnamed and unrecorded, because their destruction was left to work out itself. The few that are mentioned are probably mentioned simply because they were the exceptions. If Cissa at the storm of Anderida "left no Briton alive," the mention of his ruthlessness points to its being unusual. The Saxons were not professional butchers, and if they were merciless when no quarter was taken, they were far less merciless than the Danes who came after them. Rather they had a horrible fashion of killing by

¹ Professor McKenny Hughes has remarked that it is unlikely that the invaders should have made it their policy to exterminate a people who were their superiors in handicrafts, *e.g.*, in pottery.

passivity. Had they only moved from point to point, from town to town, with method and despatch, method and despatch might have been forthcoming to withstand them; but this leisured nonchalance was like the fascination of a serpent, as paralyzing as it was fatal.

It is therefore of little use to seek for the evidence of any organized and purposeful resistance, for there probably was none. The most that can be hoped for is to recover here and there some of the points which indicate where, for the time being, was the high-water mark of the Saxon advance. Occasionally, but rarely, these are recoverable in place-names. If Wansdyke and Bokerley Dyke are really works of the Britons of this period, they furnish a more complete piece of evidence—the only evidence indeed of any attempt at organized resistance; but their course, seemingly covering nothing but the south-western promontory of the island, shows that the day was already lost when these works were planned, nor is it possible to show that they were ever completed. That a dyke so extensive as the Wansdyke, 80 miles in length, could have been long maintained without provision of well-trained troops and constant garrison-duty at close intervals, it is impossible to believe, and of such provision there is no proof; and, moreover, no people can successfully dyke itself about against foes whose attack may come from any point of the compass. The Wall of Hadrian, with its elaborate provision of fortresses and watch-posts, and its permanent garrison of many thousands of picked troops, may have served the Romans against such rude foes as the Caledonian tribes, seemingly little familiar with the sea and lacking the means or the will to turn the position by landing in force upon its rear; but no such dykes could have long availed the Britons in warfare against enemies who were as much at home on sea as on land, and who were free to attack not merely some 200 miles of land-frontier, but also an unprotected sea-frontier twice as ex-

tensive. The Britons, if they did indeed nerve themselves to the effort of constructing these dykes of the south-west, must very quickly have been disillusioned as to the value of such a mistaken method of defence, and speedily abandoning the useless attempt to hold so impossible a frontier, must have contented themselves with garrisoning merely a few posts like Hod Hill, and with praying that the next onslaught might not come from some unexpected quarter—as it invariably did.

Wansdyke,¹ the most extensive of all English works of the kind, had a total length of 80 miles, and for the major portion of its length it is still in very fair preservation. It commences in Berkshire, and traverses the counties of Wiltshire and Somersetshire to the Severn at Portishead. First noticeable near Great Bedwyn, west of Inkpen, it crosses Savernake Forest in a right line, and continues with less directness westward across the downs north of Martinsell Hill by Heddington. From Heddington to Bathampton Down, where the dyke is to be seen at its best, its course, straight as a ruled line, coincides with that of the Roman road from Verlucio (near Marlborough) to Bath. Its course westward from Bathampton to the coast is less direct, being determined in general by the contours of the high ground overlooking the valley of the Avon. Much of this latter section has been entirely destroyed. The works consist throughout of a single vallum with a deep fosse to the north, and at most points there is a more or less pronounced parapet along the northern edge of the fosse. Where the slope of the hill is very considerable the vallum is slighter, and even disappears altogether. Where best preserved the crest of the vallum rises as much as 9 feet or 10 feet above the ground level, and 18 feet or 20 feet above the floor of the

¹ *I.e.*, Woden's Dyke. Woden was the Scandinavian Mercury, the god of boundaries.

ditch, the total width of vallum and fosse varying from 80 feet to 90 feet. Unlike most dykes, Wansdyke appears to have been expressly designed so as to touch several important camps presumed to be British: it skirts the British village on Bathampton Down, incorporates the northern sides of the works at Stantonbury and Maesknoll, and terminates on the coast close beside Portishead Camp; while all along its course in front and rear lie more than a score of other camps, larger or smaller.

Pitt-Rivers established definitely the fact that between Heddington and Bathampton Down, where the course of the Wansdyke coincides with that of the Roman road, the latter is the earlier work, the builders of the dyke having availed themselves occasionally of the pre-existing road to save labour. Theories, therefore, which would attribute the work to pre-Roman days no longer call for discussion. As the Romans can scarcely be supposed to have tampered with their own road, the dyke must date after the departure of the Romans; but how long after it is impossible to say. The usual view sees in it a "mark" or boundary line constructed by the Saxons after their settlement—

"A mighty mound sith long he did remain
Betwixt the Mercian rule and the West Saxon reign";

and if this were so, then from the position of the fosse on the northern side it would seem to follow that it was of West Saxon construction. Pitt-Rivers himself pointed out that the Wansdyke and Bokerley Dyke together, "though not continuous works, defend the whole south-west promontory of England, including Wilts, Somerset, Dorset, Devonshire, Cornwall, and part of Hants," and present the appearance of a continuous scheme of defence embodying a single design. The gap between the eastern termination of the Wansdyke and the northern end of Bokerley Dyke might be accounted for either by supposing

it to have been sufficiently filled by the forest which gave its name to Berkshire, or by assuming that the completion of the whole scheme was in some way frustrated. He saw an analogy between the manner in which the Wansdyke leans at short intervals upon stray camps and the arrangement of the Roman Walls of North Britain, the Walls of Antoninus and of Hadrian, with their regular stations; and evidently he would have liked, had the evidence justified it, to attribute the whole to the Romanized Britons. That it was rather a defensive work than merely a boundary mark he was convinced. It may be pointed out that it would be more to the interest of the Britons than of the Saxons to destroy the open Roman road leading direct to Bath and the West. Wherever may have been the Mons Badonicus which witnessed the great fight of 520, the battle of Deorham and destruction of Bath (577) must have rendered untenable the Wansdyke. We should therefore have to suppose that the dyke was built between 412 and 577.

Bokerley Dyke is a smaller work, some 4 miles only in length. It marks to-day the county-boundary of Wiltshire and Dorsetshire, between Woodyates and Cranborne. Its general course is from south-east to north-west, the fosse being on the northern and eastern side. Close to Woodyates it crosses the line of the Roman road from Old Sarum to Badbury Rings,¹ 11 miles to the south-west, and cutting a section at this spot Pitt-Rivers again proved the dyke to be of later construction than the road.

Although actual proof is not yet, and possibly never may be, forthcoming, there is very strong reason to think that both Wansdyke and Bokerley Dyke were the work of Romanized Britons seeking to secure themselves against

¹ Bokerley Dyke barred the approach to the Dorsetshire centre in Badbury, just as the Wansdyke in another fashion blocked the highway to Bath. In a manner this supports the view that Badbury was Mons Badonicus—a position to be fought for at any cost by Briton and by Saxon.

the Saxons by the same means which they had seen their Roman masters more successfully employ against the Northern tribes. Those points in which these Romano-British dykes differ from the genuinely Roman works, are precisely such as would be expected in the work of semi-barbarian imitators who saw their model without understanding it. With the Roman the vallum was but a subordinate matter, merely the link connecting into one co-ordinate whole the various points occupied by the troops. With them it was not the wall, but the men were the important thing, the real secret of their strength. With the Briton the wall was everything. It was bigger, broader, and if need be longer than the Roman's walls. But to the more important matter of the maintenance and distribution of his garrisons he seems to have paid but small attention. Such forts as actually stand upon the dykes were probably there before, not expressly built to meet the special requirements of his case, and when all is said they are but few, in no way comparable to the 17 fortresses which marked the 70 miles of Hadrian's Wall and the mile-castles which covered the intervening spaces. The Briton was guilty of the oft-repeated error of spending lavishly upon the *matériel* and neglecting the *personnel*.

Unaccountable as it may be, there seems to be scarce any evidence of the Britons ever having taken the offensive with even momentary success. Mostly the history of the period, so far as we know it, is a series of retreats; and repeated retreats but breed the habit more robustly. He fell back until the Saxon was content to leave him in peace again—in Cornwall and Wales and the North—but with every step of his retreat he became more of a fugitive, more of a savage, retaining at the last nothing beyond his native virtue of a desperate courage in the last resort. The Celt could not plan, prepare, and bide his time, but could and did fight when cornered. No Saxons probably went Briton-hunting for the mere sport of it, for

the work was too dangerous ; but they moved forward whenever they desired more land, took it, and settled down again ; and once more the Briton reconciled himself to facts, so much the poorer in territory, so much the poorer therefore in resources, so much the more a savage. He had been an artist once, and the Roman had killed out that gift : he had never been rich since the Roman's coming, and he had never learnt any new lesson save that of passive obedience to the Roman tax-gatherer. Of the positive qualities of the Roman he had acquired none at all, and it was too late now to try to learn them. So he built for himself no forts of masonry, practised no world-conquering strategy, merely drifted. He drifted so far that at last the Saxon was content to leave him alone, nay, even to offer to him the hand of friendship, and the two who had fought each other so long became *more Britannico* excellent friends. By that time the influx of fresh invaders had ceased : there were enough in England, not too many left behind. When there commenced another influx, that of the Dane, the now Christian Saxons were as much the enemies of that heathen Northman as were the Britons, and the two had a common interest in keeping him out.¹ Perhaps the menace of the Dane did as much as anything else to reconcile Briton and Saxon. Though they occasionally took up arms again, the Britons—the Welsh, as they now were—gave to the Saxons far less trouble than they presently gave to the Normans. The Norman, like the Dane, was the common enemy of Welsh and English, and to be treated accordingly ; indeed his foes of that date knew, what their later-day descendants too often forget, that the Norman *was* a Dane and nothing else.

¹ As a general statement of the case this is not inconsistent with the occasional alliance of Danes and Britons against the Saxons, *e.g.*, in 835, when Egbert, King of Wessex, defeated the allied forces of the Danes and the West Welsh at Hengston Hill, Cornwall.

The Christianization of Saxon England did not begin until the dawn of the seventh century ; it was barely completed when the eighth century was half ended. Christianity led to the revival of the art of building in stone, and to the concentration of the people about their churches. The Saxon lost his ancient dislike of neighbourliness, his dread of town life, and many of the deserted sites of Roman stations struggled once more into life. But this revival had scarcely well begun when the Dane intervened, and created a worse desolation than that before. If London could not withstand him, still less could smaller fortresses. Once again they died down, and the number which revived once more in Alfred's reign was but small.

The extreme sparseness of the population throughout Saxon times must have left wide areas of land quite unoccupied, and the old forests once more reasserted themselves—convenient hiding-places for refugee Britons, some of whom may have maintained a hole-and-corner existence for years even in the southern and south-eastern counties, and in the midlands. But it must necessarily have been an existence of self-effacement, not parading itself in the construction of any earthworks likely to attract attention. In the south-west, in Wales, and in the north, it was another matter, and a large number of the earthworks there remaining were possibly occupied, if not actually constructed, by Britons of the post-Roman times. This may account for their relative meanness as compared with the magnificent and probably much older works of the Down-counties. The refugees had neither the heart nor the means, possibly not the leisure, to rear a second Maiden Castle ; and besides such a fortress would have been but a challenge to fresh attacks. The way to safety lay rather in dispersal and self-effacement. It is an unquestionable fact that, with very rare exceptions, the multitudinous camps of the area between the Parrett and the

Lizard are of quite secondary size and strength, and that their sites have so far yielded few evidences of culture. To all seeming they were the work of a decadent race of builders. On the other hand the number of religious monuments in Cornwall—circles, avenues, menhirs, &c.—is so large that one may hardly doubt that the refugee Britons had actually gone back to paganism, and that the journeys of Saint Patrick and his fellow missionaries from Ireland were something more than mere revivalist tours.

Similarly in Wales the evidence, such as it is, goes to suggest that the numberless *castells* and *caers* of the Cambrian hills are mostly of a date later than the freedom of Britain, built mostly in the course of the struggles against the Roman and the Saxon. Dr. Christison arrives at much the same conclusion in regard to the hill-forts of Scotland.¹ If the hills of Scotland had any population at all in pre-Roman times it must have been too sparse in numbers and too low in civilization to rear any very notable works—a thinly scattered population of nomad hunters and fishers, not more gregarious than the game they hunted; and probably the condition of the natives was little better down to the ninth or tenth century, and the days of Kenneth Macalpine.

¹ *Early Fortifications of Scotland*, p. 386. It is there stated that there is no evidence to carry them back to the Bronze Age, but that "there is some evidence for their existence at the early dawn of Scottish history, soon after the departure of the Romans."

CHAPTER XII

SAXON AND DANISH EARTHWORKS

*"He loved the freedom of his farm,
His ale at night by the fireside warm,
Gudrun, his daughter, with her flaxen tresses ;
He loved his horses and his herds,
The smell of the earth and the song of birds,
His well-filled barns, his brook with its water-cresses."*

IF little can be said with certainty of the earthworks of the Romanized Britons, of the works of their conquerors almost as little is known.¹ The unpremeditated character of the conquest would in itself suggest that the Saxons had no very highly developed ideas about military earthwork, no peculiar forms of fortification, and no characteristic methods of warfare; and if they were not the people chiefly responsible for the dykes and ditches of the map, there is no single form of earthwork which can be said to be more suggestive of the Saxon than of other peoples, earlier or later, unless it be the wet moat.² This is the one novelty which came in during the Saxons' time,

¹ "No serious attempt has yet been made to ascertain what Anglo-Saxon fortification really was," says Mrs. E. S. Armitage in *Proc. Soc. Antiq. Scot.*, vol. xxxiv. (1899-1900).

² Neither the Briton nor the Roman, saving in exceptional cases, relied at all upon *wet*-ditches for his defence. Most of such ditches are of course Norman or post-Norman, but some of them were certainly constructed in Saxon times and by Saxon hands.

but whether it was distinctive of one of their tribes more than of another cannot be determined. All the tribes were very near kinsmen to one another, as well as to Danes and to Normans; but only the last-named, as will be seen, made a study of the science of war and so developed for themselves a distinctive style of fortification.

The various tribes of whom we speak collectively as the Saxons¹ were uniformly lovers of the sea. Pirates who practised their profession "in gentlemanly fashion," as Thucydides would have said, they were quite as much at home on shipboard as on shore. They left the hills to others, and themselves frequented the rivers, the sea-marshes, and the coasts, proud to be known as Vikings—"men of the creeks." Their life offered small opportunity for the mason, but ample scope for the carpenter; they were skilful workers in timber, of which they built alike their "sea-snakes" and their dwellings. Ingrained with that jealous individualism which is to this day characteristic of the English, they knew nothing of the communal life of the ancient Britons. With the Britons the unit was the tribe, crowding into the narrow circle of a single hill-fort, or at least looking to one common *oppidum* for refuge in time of need; but the men of the Baltic acknowledged no bond of unity beyond the influence of their chiefs, who preferred to live each in his own homestead, to seek each his own fortune, hating to be overlooked by any neighbour.² They had indeed long passed the very earliest stages of civilization. They were already agriculturists, but as it were under protest. The sea was their real home still, and when his hour was come the

¹ For the real diversity of these tribes, see T. W. Shore's *Origin of the Anglo-Saxon Race*.

² See on this matter H. M. Chadwick, *The Origin of the English Nation*, where the older view that the unit of society in the Baltic tribes was the family is set aside in-favour of a sort of embryonic feudalism.

Viking was fain to be buried in full war-harness, actually in the "long-ship"¹ in which he had spent so much of his life; or failing this, desired at any rate that his barrow should be reared upon the windy crest of some "ness" commanding a far view over the waters—

"a token to be
To the men that come after, that when o'er the sea
Through the mist of the whale's-bath their long-ships drive by,
They may see it afar, and may know it, and cry,
'Lo! there sleeps great Beowulf under the sky!'"

Far from water, salt or fresh, the Baltic peoples rarely went. Their homesteads were at the water's edge, and the immediate proximity of water is fully as much a characteristic of their settlements as the reverse is characteristic of British camps. Their traces must therefore be looked for in the lowlands and along the foothills, rather than in the drier uplands and on the hill-tops. Such at any rate was the earlier rule, until the growing density of the population drove the overflow further and further from the sea-coasts and the banks of the rivers into the forests, and up the slopes of the hills.

If the invaders built any earthworks at the time of their first coming, no record of them remains. Probably they built none at all. Before the Saxon had come to be regarded as an enemy his kinsmen had long been settled upon the eastern coast of Britain, and here, where the new-comers naturally landed, they were sure of welcome. They had no need perhaps of any earthworks to cover their landing-places or to safeguard their ships. Once landed they put little trust in earthwork, less even than did the Roman. It was the Germanic way to rely rather upon the terror and the desolation

¹ It was not uncommon to bury the Viking actually *in* his ship, piling the barrow over this, as in the well-known case at Gokstad. Montelius (*Civilization of Sweden in Heathen Times*) figures other barrows with peristaliths arranged in the form of a ship.

wherewith they ringed their place of settlement, and ere the Briton, if he desired it, could grapple with his foes, he must make his way across the "mark," the wasteland which, waste and wide in proportion to his foes' prowess, served them in lieu of fosse and wall. Each successive horde of invaders hewed out for itself a new "mark." The enemy—the "Welsh"—lay always before it indeed, but behind it was always safe retreat, if needful, upon others of the blood. And for the most part the "Welsh" did not venture to challenge the interloper, when once the new settlement was effected and the mark established. It was only when the tide of invasion had ceased to flow, when the settlement was in effect complete, that the various tribes, no longer united by the bond of a common peril in face of a common foe, began to quarrel one with another; but again there is no reliable record of any earthworks raised during the struggles of the Heptarchy. There is no known series of forts or fosses that marks the alternating greatness of Northumbria, Mercia, East Anglia, or Wessex. The one great work attributed to an individual monarch—Offa's Dyke—was constructed not against his Saxon rivals, but against the Britons of Wales. This proves, indeed, that the Saxons did construct earthworks, but neither record nor tradition speaks of any walls of Ida or fortresses of Penda, and the name of Alfred himself attaches to no earthworks such as are claimed by Cæsar, by the Danes, or by the Devil. Even the arbitrary imagination which allotted all "camps," round, rectangular, and oval, to Briton and Roman and Dane severally made no provision for the Saxon.¹

¹ The same feeling guides the nation to this day. "We ourselves, mainly a Teutonic people . . . have never heartily entered upon any system of defending the country by fortified places, and have always placed more reliance upon the arm of flesh and our wooden walls than upon those elaborate stone- and earth-works which other nations have carried to perfection." (Greenwell and Rolleston, *British Barrows*, p. 125).

It was only when, in the ninth century, the inroads of the Danes threw the Saxons in turn upon the defensive that the latter were compelled to pay more attention to their fortifications, and very fortunately the record of the *Anglo-Saxon Chronicle* commences but little later. It contains repeated allusions to the making of various fortifications by Danes or Saxons; such phrases as "wrought a work," "wrought and built a burh,"¹ recur again and again amongst others more or less definitive. Sometimes the builder is a Saxon king: Ina, for instance, "wrought the burh" at Taunton (before 721) to secure against the West Welsh (Britons of Cornwall) his conquest of the Somersetshire levels from King Geraint. Alfred built many burhs against his Danish enemies, and his son and daughter, Eadward the Elder and Ethelfled the Lady of the Mercians, were yet more active in that kind. Amongst those which Ethelfled built were works at Stafford and Tamworth (913) and Warwick (914), while Edward "wrought" the burhs at Witham and Maldon, in Essex. At other times it is the Danes are the builders—at Benfleet, at Quatbridge on the Severn, at Reading, &c. Inasmuch as the settlements of the Saxons were mainly in the lowlands, and the Danes seldom travelled far from their ships, these Danish works are commonly in riverine positions: the Saxon for defence, the Dane for offence, built them upon one or both banks of the rivers, on the Ouse at York, on the Trent at Nottingham, at

¹ The root is found in the old Teutonic *bergan*, "to shelter," whence the various dialectic forms *bury*, *berry*, *barrow*, *burrow*, *borough*, *borrow*, *burg*, *burgh*, *burf*, *barf*, *berth*. The word *bower* (e.g., in Maiden Bower, Bower Walls at Clifton, and the village of Bower or Burgh Chalk in Dorsetshire) has been confused with one or other of these forms, although really derived from another word, the old Teutonic *būro*, "to dwell." The A.-S. *burh* still survives in actual use in Somersetshire. A farmer, guiding the writer to the fragmentary ring-work known as Road Castle, near Exford, said, "This is Road Castle Field, and there's the burh." N.B.—He did not say "bury," and the work in question has no mount.

Buckingham and Stamford, Hertford, and elsewhere.¹ But what was the precise form of these various "works" is rarely explained. We are told, indeed, in another record² that in 871 the Danes "made a rampart between the rivers Thames and Kennet, on the right side of the royal city" of Reading, but that was for a winter camp, and was evidently just such another work as the Dyke Hills at Dorchester (Fig. 7). Such entrenchments, partly because of their low-lying positions, partly because they were not permanently occupied for any length of time, would for the most part be quickly destroyed either by the soldier or by the ploughman.

The Bedfordshire Ouse was the scene of a good deal of fighting between Saxons and Danes, and a number of earthworks yet remain upon its banks which were almost certainly "wrought" by the Danes. Two of these may be cited as examples of their class, viz., the little fortress known as Gannock's Castle, or The Gannicks, at Tempsford,³ near the junction of the Ouse and the Ivel, and the larger works at Willington, four miles from Bedford.

Gannock's Castle (Fig. 113) lies 200 yards away from what used to be the bank of the river. It is a very regular, rectangular enclosure with an inner area no more than 180 feet in length and 84 feet in width, enclosed within a moat fully 20 feet in width. Along the edge of the moat runs an earthen rampart, of which the crest is from 11 to 12 feet above the floor of the moat. The north-eastern

¹ G. T. Clark identified them with the mottes now almost unanimously regarded as Norman, and misapplied to those mottes the A.-S. term *burh*. Amongst the many arguments adducible to disprove his theory is the fact that in most cases where the construction of a burh is recorded by the *A.-S. Chronicle* there is no mound; and in many of the cases in which a mound is found, there is satisfactory evidence that a Norman stronghold stood upon the site.

² Asser's *Life of Alfred*.

³ Professor Skeat declares the first syllable of the name to be the same as Thames, which proves the river Ouse at one time to have borne the name of Thames.

angle is occupied by a low mound 20 feet in diameter, but rising only some 2 feet above the level of the rampart. On either side of this mound the rampart is intermitted to leave an entrance. The *Anglo-Saxon Chronicle* records that the Danes built a fortress at Tempsford in the year 921, from which they were speedily driven by Eadward. There seems no reason to doubt that Gannock's Castle is a remnant of their fortress, for that it was once much larger is shown by the traces of other earthworks in the

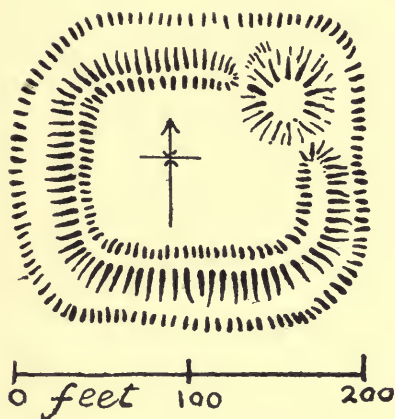


FIG. 113.—GANNOCK'S CASTLE, TEMPSFORD.

ground about. The remaining enclosure is perhaps no more than the inner fortress of a work originally planned upon a like scheme with that at Willington, of which the outer wards and fosses have now disappeared. The allusion in the *Chronicle* is doubly important, for not only does it furnish a determinate date for the construction of the work and a determinate attribution to the Danes, but it also shows how remarkably the Danes' works might occasionally resemble the ordinary moated enclosures of Saxon and Mediæval times.

Vastly more imposing is the fortress at Willington (Fig. 114), on the south bank of the Ouse, in spite of the "ravage

of ten long sad hundred years"; for what was once its outer fosse is now a roadway, and right across its central stronghold, parallel with the river, has been driven a railway. In its original shape the fortress must have consisted of a central enclosure of rectangular plan, analogous to that at Tempsford, but considerably larger, with an inner and an outer ward running parallel with each other round its eastern and southern sides, all three being fossed in such

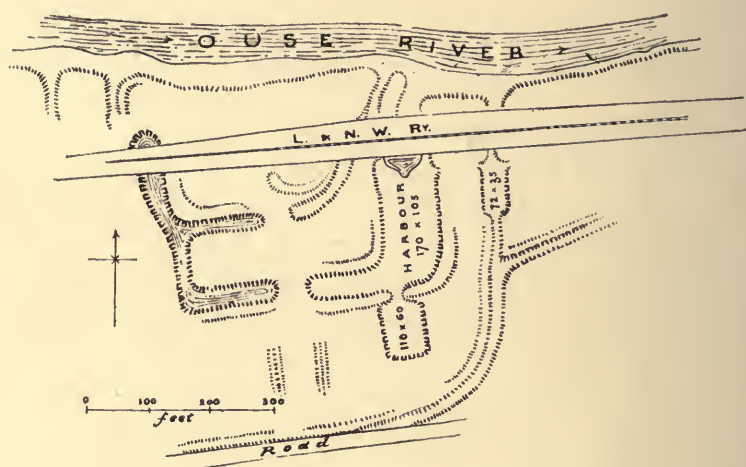


FIG. 114.—WILLINGTON.

a way that the ditches were filled by the adjacent river. The fosse of the central area was fully 40 feet in width, that of the inner ward 30 feet or more, and that of the outer ward considerably smaller. Traces remain of the valla which originally followed the edges of all three moats, and at the north-west corner are distinct vestiges of another and smaller ward lying immediately upon the river. But what gives to Willington Camp its peculiar interest is the presence of certain basins, which apparently served as docks for the vessels of the Danes, who here proposed to spend the winter of 921. Of the three basins the larger, formed by an expansion of the moat of the

inner ward, measures as much as 105 feet in width at its greatest, and still has a length of 170 feet, although the building of the railway has sadly stunted its original proportions. It still contains a little water, and before the railway dammed its mouth it was a broad and fairly deep inlet of the river, calculated to have been large enough to accommodate between twenty and thirty Danish *ceols*. At its southern end a passage 25 feet wide opens into a second oblong basin 110 feet by 60 feet. The third basin, much smaller, was apparently intended to dock but one vessel at a time. It is formed by widening the outermost fosse, and measures but 72 feet by 35 feet, with a depth of 6 feet or less. Traces remain of what seem to have been slip-ways running up from this and from the largest basin across the outer ward, here only some 100 feet in width.

The Danes were disappointed of their purpose at Willington. After a bloody fight Eadward stormed their camp and doubtless destroyed most of their fleet, the remnant of the "heathen" retiring down the river to take up, with no better fortune, a second position at Tempsford. If the suggestion that Gannock's Castle corresponds to the inner stronghold at Willington be correct, the difference in size is thus explained. The refugees at Tempsford were but a remnant of the force—perhaps 3,000 strong—which had been entrenched at Willington. They were not sufficient to build a very extensive work, nor did they require it to shelter their minished numbers.

Such a work as that of Willington, if really Danish, presumably represents the very highest development of Danish spade-work. For the most part the Dane required no such elaborate defences. A plunderer rather than a colonist, rarely staying long in any one spot, as a rule he required nothing more than such temporary works as might cover his landing. The camp at Shobury (Fig. 115),

if rightly attributed to Hasten, is exactly what was to be looked for. At the present time there remain only scraps—some 1,300 feet in all—of the fortress, which had an extreme breadth of 750 feet. The single vallum extended to as much as 2,800 feet, covered by an enormous fosse 25 feet in breadth at the floor; and the base, or side open to the sea, was 1,900 feet in length. It was traditionally the camp of Hasten (Hasting) and his Danes in 893. Very similar, but stronger, was the promontory-fort of Hengistbury Head, formed by running two deep ditches across the strip of ground between Christchurch harbour and the Channel Sea. One of the ditches is still 20 feet in depth. The smaller work known as Danesfield—the name may or may not be well-chosen—near Medmenham, is a miniature replica of the Dyke Hills at Dorchester (Fig. 7), showing two parallel lines of rampart, terminating at one end on the bank of the Thames. The other end presumably also ran up to the bank, but it has been destroyed to make room for Danesfield House. Danish, too, perhaps, is the immensely strong little promontory-fort at Burpham (Fig. 212). It is not impossible that some few of the simpler ring-works found near the coast or the rivers¹ may be Danish works, but

¹ *E.g.* the once strong, if small, fort called Thunorbury, on Hayling Island (p. 205). Another is the camp, small and oval and very strong, $1\frac{1}{4}$ miles south-west of Porlock Church, Somerset; and eastwards along the coast or the foot-hills as far as the Parrett are the vestiges—or tradition—of several others. The Danes, or other similar pirate-raiders, certainly did land here or hereabouts on several occasions, *e.g.* 886 (when they are said to have burned St. Dubric's Church in Porlock), 918, and 1052. There are dozens of Danesboroughs, Danesburys, Danes' Camps, on the map, but such names are very misleading, and the "red terror" of the pirates led to the association of their name with many works which they probably never even saw. The camp of Dowsborough, in the Quantocks, to all appearance purely British, is commonly called Danesborough, probably only because of the impression left behind in the district by Hubba and his kin. In other instances the name has been attached to a site simply because the camp happens to be oval, *e.g.* Blewburton Hill, Berks, where it is even doubtful whether there was ever any camp at all.

it is quite as likely that they are older works, perhaps occupied by the Danes, who are said, for instance, to have held the British fort of Bratton Castle, near Westbury, after their great defeat by Alfred at Ethandune.¹ Poundbury, at Dorchester, again is generally said to be a Danish work, but why the Danes should have troubled to build it with Maumbury Rings only a few yards away, and Maiden Castle little further, does not appear. The unusually fine works surrounding the ancient town of Wareham are yet another instance of such arbitrary attribution, based on little more than the bare record of

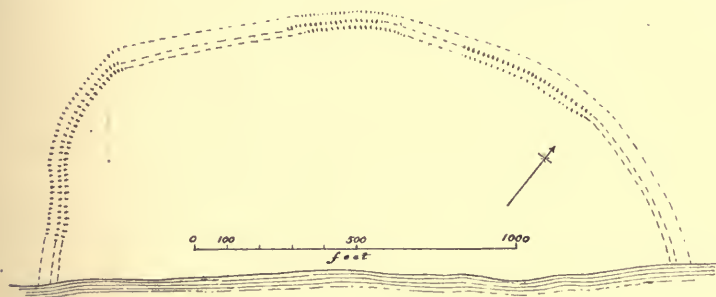


FIG. 115.—SHOEBURY.

the fact that the Danes constantly landed here. As a matter of fact the earthworks, in their present shape at any rate, are mainly Norman and Cromwellian. Even when the Danes became permanent masters of part or all of the land, it does not appear that they constructed any earthworks of note, still less that they developed any peculiar type of earthwork. Their occupation of the Danelagh under the terms of the Peace of Wedmore was not followed, so far as is known, by any systematic fortification of that area. The "Danes' Camp" at Hunsbury, Northants, belongs to the Late-Celtic period. The Danes

¹ A similar explanation may account for the names of Danes' Dyke and Little Denmark on Flamborough Head, of Danes' Camp applied to the British fort of Hembury Castle, Buckfastleigh, and many other cases.

were content mostly to occupy the existing Saxon burhs, such as Stamford, Lincoln, Nottingham, and Derby. And if they built no defences to safeguard themselves against their acknowledged master Alfred, they were not likely to build any when in the eleventh century they were in possession of the whole of England.

If little is known of indisputably Danish works, of those of the Saxons there is not more certainty. We are told that King Ida, "the Flamebearer," fortified Bam-borough with a hedge and a wall, *i.e.* with a vallum of earth and a palisade; and the building of a vallum

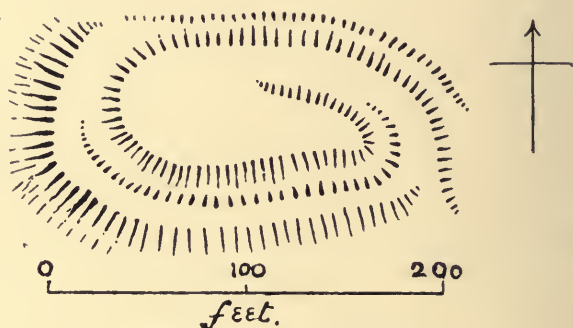


FIG. 116.—KENWITH'S CASTLE.

implies, we may suppose, the sinking of a fosse. Ida made himself King of Bernicia in 547, and his fortress at Bam-borough was probably a promontory-fort. Moat and wall and palisade were, therefore, employed by the Saxons, but we are not told that they affected any particular plan more than another. At the other end of England, near Bideford, is a curious earthwork known as Kenwith's Castle (Fig. 116), traditionally said to have been built and occupied by the Saxon of that name at the time of a Danish inroad in 878. It is very small, and its defences are less artificial than natural; it has in fact much the appearance of a work hastily wrought as the occasion demanded. But that it is in reality a Saxon

work there is no proof and little likelihood.¹ Tradition again declares that the hill-forts of Anstiebury² on Leith Hill, Surrey, and Holmbury Hill, four miles to the west, were respectively the work of the Danes and of Aethelwulf, the father of Alfred, who at Ockley, under the southern slopes of Leith Hill, inflicted upon the invaders (853) the most bloody overthrow which they had ever experienced. But even if it is conceivable that the Saxon king should have had time or desire to construct such a fortress as Holmbury camp, it is incredible that he would have allowed the enemy to entrench themselves at leisure in Anstiebury, the finest camp remaining in Surrey. The Danes were merely occupying a work which they found already existing, and probably of British age; and in all likelihood Holmbury also was originally British. Similar traditions attach to many other camps which are known to be of much older date, *e.g.* Clearbury, near Salisbury.³ Near Scamridge, in the North Riding, is an extensive series of dykes, said to have been constructed by the Northumbrian Saxons under King Oswy (*obit.* 670), and

¹ The raiding of the time did not call for the construction of earthworks on any great scale, and even if Kenwith's Castle were really constructed at the date in question it would be more probably the Danes' stronghold than their conquerors' camp. Other authorities place the scene of the fight at Cannington (*quasi* Kenwith's-tun), 4 miles west of Bridgwater. Here is a small and feeble camp of normal plan on the crest of a low hill (200 feet) overlooking the levels about and commanding an ancient ford over the Parrett at Combwich. That some great fight actually occurred here is proved by the discovery of the graves of the slain: "They lie on a hill close under the camp and are very numerous, many of the skeletons bearing marks of weapons. . . . A short exploration of the trenches into which the dead have been huddled in long rows has yielded pottery of Anglo-Saxon make, and distinct evidence of indiscriminate massacre" (Rev. C. W. Whistler in *Folklore*, xix. 1, March, 1908). The Danes may have utilised the camp, but it is surely older than their time.

² The first part of the name is said to preserve that of Hengist.

³ The fact that some of the hill-forts were used by the Saxons as burial-places (*e.g.* Winkelbury and Highdown) is proof that these forts had long been abandoned by their occupants, and that the Saxons did *not* regard them as desirable places for occupation by the living.

still known as the Six Dykes, or Oswy's Dykes, but there is nothing distinctive about them.¹

Amongst the very few earthworks which may with some certainty be attributed to Saxon hands are that at Eddisbury, near Delamere, in Cheshire, and those at Witham and Maldon, both in Essex. The latter is now almost destroyed, and Witham burh has been greatly mutilated, a railway cutting it right across, and a station standing almost upon the centre of its site. The burh at Maldon, now to all intents ploughed out, was of a fairly regular oval plan, fortified apparently by a wide and deep fosse, a high vallum, and a palisade, though an old description of 1775 represents it as having a second wall surrounding the inner part of the area, and declares the ditch to have measured 60 feet across.² The burh at Witham (Fig. 117) is less regularly oval, measuring roughly 1,200 feet by 1,000 feet, and surrounded by a considerable vallum and a ditch 30 feet wide and 3 feet deep; and there remain considerable portions of a second and inner vallum, very roughly parallel with the first, to which it is joined by two cross walls. This inner area, about 600 feet by 525 feet in extent, had likewise its exterior ditch, but of smaller proportions, apparently not more than 10 feet in width.³ Both at Witham and at Maldon the burh occupies a slightly rising site close to water, and both appear to be of one design and age. They are usually believed to be the work of

¹ According to Messrs. Greenwell and Rolleston, they are "apparently intended to protect an invading body advancing from the East" (*British Barrows*, p. 484), and are therefore similar to the more extensive dykes of Cambridgeshire and Flamborough Head. The same writers go on to say that "there is probably no place in England which has produced more arrow-points, scrapers, rubbers, and other stone articles," which fact raises a presumption that the dykes are older than the days of Oswy.

² See an article by the late Mr. I. Chalkley Gould in *Transactions of the Essex Arch. Soc.*, New Series, vol. x., part ii. (1907).

³ *Ibid.*

Eadward the Elder, who is said by the *Chronicle* to have "wrought and built the burh at Witham" (913), and to have "built and established" that at Maldon (920). They were intended as fortresses against the Danes, who in fact laid abortive siege to Maldon burh in the very next year.

While her brother Ethelred re-fortified the old Roman station of Chester in 915, Ethelfleda, the "Lady of the

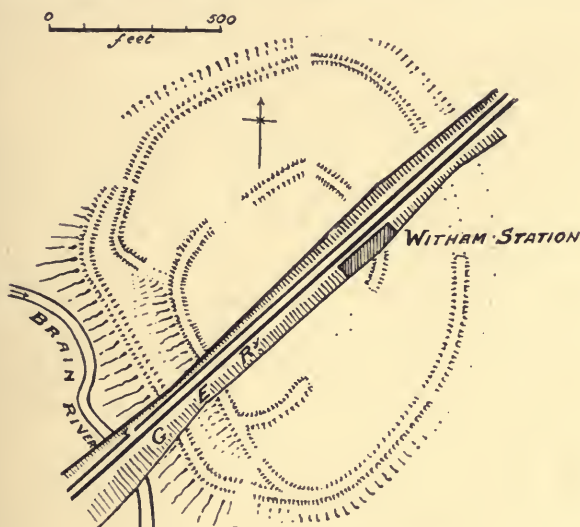


FIG. 117.—THE BURH, WITHAM.

Mercians," constructed a new burh at Eddisbury (Fig. 118), commanding the roadways from the east to Chester and to Wales. The vestiges of this fortress Mrs. Armstrong thinks to be the best surviving example of its class. They consist of a strong double vallum and intervening fosse surrounding one half of Eddisbury Hill; for on the remaining sides the abrupt fall of the ground rendered needless such extensive works, and a mere palisade was perhaps all that was required. The vallum still stands upwards of 14 feet high, and, though now overgrown with turf, is said to be constructed of stone. The ditch is 35

feet wide. The area thus enclosed measures some 1,200 feet by 750 feet, or upwards of 12 acres. The name of the Old Pale, still clinging to the earthworks, betrays their Saxon origin.¹

Indeed, the Saxons were not by habit builders of military earthworks at all. At their first coming they seem to have made few or none: theirs was not a military invasion but an immigration, and one need no more look for extensive traces of earthworks to mark it than one

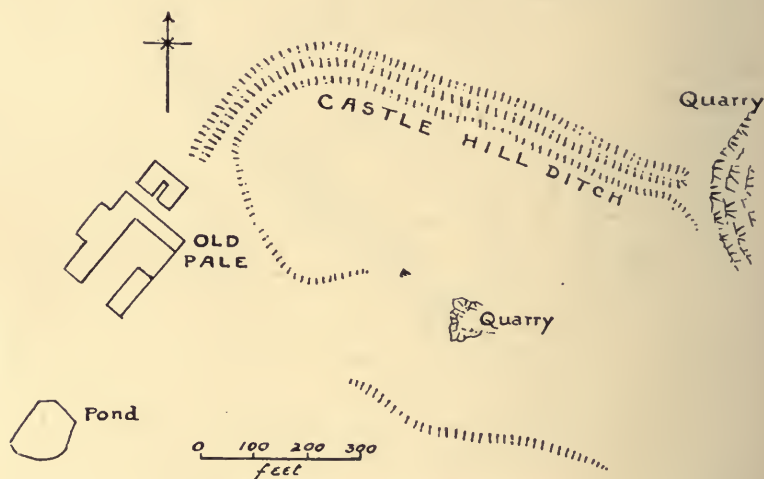


FIG. 118.—EDDISBURY, THE OLD PALE.

looks for them in the track of the Pilgrim Fathers of the New England States. Earthworks, except where they mark a deliberate military occupation like that of the Romans or of the Normans, are the work not of the people who attack, but of those attacked. It was seemingly only when the Saxons were thrown upon the defensive, whether against the "West Welsh" of Cornwall or against the Danes, that they found it desirable to set about the systematic

¹ Eddisbury gives its name to the Hundred. For the meaning of "pale," see p. 256, note. One of the old ditches of the North Riding is still called the Paled Ditch.

building of burhs. But they cannot be shown to have developed any new design. They had from the outset had before them the Romans' work: they began by occupying the old Roman sites and repairing the old walls, and they ended, it would seem, in building new fortresses rudely imitating the Roman plan, but wrought perhaps as often of earth and timber as of brick and stone. Thus in 920 Eadward the Elder built a fortress at Thelwall, near Warrington, and the name of that place still preserves the fact that it was merely "a wall of thills," *i.e.* of piles, a stockade of timber.¹ Mr. Chalkley Gould doubted whether Maldon burh ever boasted Saxon mason-work, and there is none now traceable at Witham. But where the Saxons entered into possession of the ruins of older Roman fortresses, they would repair these usually, it is to be supposed, with masonry,² to the best of their ability, if the necessity arose. So Regnum, which Cissa had occupied, retained its walls and grew up to be Chichester, and so the *Chronicle* records in various places the repair of other Roman fortifications. The Saxon built no hill-top camps:

¹ Exactly such a work is denoted by the term "bulwark," if Prof. Skeat is right in deriving it from "bole," a tree-trunk. The *New English Dict.* does not challenge this derivation, although it adds the alternative German derivation from *boln*, meaning "to throw," the word "bulwark" having apparently been used at times to denote "a machine for throwing large stones." It is a local name for many earthworks, with no reference to date or origin, *e.g.* the British *oppidum* in Holwood Park (p. 129), another on Breedon Hill, Leicestershire, and the bastioned fort at Earith (Fig. 207); but it can scarcely be of any great antiquity, the earliest citation of the word in the *New English Dict.* being dated 1418.

² But even upon important sites of Roman military stations the later town, if fortified at all, was not necessarily fortified with masonry. Doncaster, for example, representing the Roman Danum, was fortified with earth only, and never boasted any better wall. Possibly the original Roman station was never walled with masonry, but left (like Castle Dykes, Fig. 108) to rely upon its vallum and fosse; a big fosse would, on that particular spot, have been defence enough. Moreover, while there is no good building stone near at hand, there was timber in any quantity. In the sixteenth century all the houses of Doncaster were built of wood (Leland, quoted by Mrs. Armitage, *Key to English Antiquities*, p. 4).

he merely fortified his existing settlements, and these lay mostly in the lowlands. To "make a burh" was simply to fortify such a settlement, and just as he imitated the Roman in his ecclesiastical architecture, so did he also in his military buildings.¹

Moreover, he must needs set his burhs in the lower ground, along which the Danes made their way. He did not concern himself to pile rampart upon rampart and fosse upon fosse: that was natural in the older peoples, who had lived all their lives under the protection of their forts, and had had long generations in which to complete their elaborate defences. To the Saxon the burh was what a fort is to us, a troublesome and temporary military necessity rather than a place of residence. It was a city of refuge when need was, but the Saxon's home was away in the open fields.

These settlements in the open were probably all originally furnished with some elementary sort of enclosure, if only sufficient to keep the cattle in and the wolves out—a moat, a vallum, and the customary stockade in most cases, but not, it is to be supposed, very elaborate of their kind.² The terminations *-ton*,

¹ Looking through the A.-S. MSS. in the British Museum to find a contemporary picture of a burh as the Saxon artist understood it, Mrs. E. S. Armitage found "an excellent drawing of a four-sided enclosure with towers at the angles and battlemented walls of masonry" "The A.-S. idea of a burh was an enclosure with walls and towers of stone, or, in other words, a walled town" (*Proc. Soc. Antiq. Scot.*, vol. xxxiv). Too much stress should not be laid upon the details of the artists' work, *e.g.* the battlements and the angle-towers; makers of pictures have ever been makers of pictures, rather than realists, all the world over. There may well have been both towers and battlements; there certainly were walls, and doubtless often walls of stone.

² The Saxon settler had, perhaps, neither more nor less need to erect elaborate defensive works against the Britons than the Cape-Dutch against Dinizulu's men. It is doubtful whether Britain produced a more formidable leader than Dinizulu, not at all doubtful that his Zulus were more formidable men in war than the Britons. Yet the Dutch lived amongst them without moats or valla or any equivalent.

-fold, and -stock, -yard or -garth, -ward or -worth, -borough, -bury, &c., so common in place-names, are thought to preserve the memory of some such rude defensive enclosures,¹ but that these were of a very slight kind is suggested by the distinctive name of Walton attaching to so many villages near Roman settlements. If the ruined vallum or wall of a Roman station, larger or smaller, were so remarkable a feature as to give a name to the Saxon settlement hard by, it is clear that the Saxon was as a rule content with something very unpretentious; and the same thing is proved by the Saxon's adopting another Roman word, *castrum*, to denote fortress-towns of a kind for which he himself had no name. Had he further borrowed the term *oppidum* for his ordinary village-fortification, he would probably in no way have strained the meaning of that term save in applying it to a permanent instead of a temporary stronghold.

Here and there survive fragments and traces of these village-enclosures. There is one surrounding the village of Hoggeston, Bucks, $6\frac{1}{2}$ miles west of Leighton Buzzard. It is an oblong area, $\frac{1}{4}$ mile in length and half that width; the corners are rounded, and the enclosing ditch is still traceable at all points, though less noticeable on the northern and southern sides. Within it stand the modern village and the parish church. About 2 miles to the south-east of this, at Cublington,² are the remains of another, the ditch and bank still formidable at the north-western side. The survival of these vestiges in such a locality is only to be understood if we suppose the

¹ It is quite possible that these terminations, and others like them, do indicate that originally there existed some sort of defensive enclosure on the spot, but very rarely is there to be found any trace of it to-day, still less any trace of what could be called a "camp." The application of, *e.g.* "bury," to scores of larger works, mostly British, is another matter, as also to isolated spots once doubtless the sites of single fortified dwellings of Saxon lords.

² See below, p. 548.

original walls to have been unusually large, though it is impossible to guess why they should have been so.¹ The case of a village like Avebury, or of Great Sherston near Malmesbury, merely shows the appropriation by the Saxon settlers of convenient earthworks of an older time, but there do not seem to have been many earthworks on so great a scale in the lowlands where the Saxons preferred to live.

As for the individual Saxon, the great man of his tribe or district, there is little to be said. He dwelt in a house of timber,² and if this were not within the common enclosure of the village, it must have been provided with some defences of its own. These would be of no different type: a moat, with or without a vallum and palisade, would suffice.³ But so far as can be proved there was nothing distinctive. The Saxon kings may occasionally have availed themselves of pre-existing works, British or Roman, when these were in convenient places, constructing within the older lines a smaller moated stronghold for their own less ambitious requirements. But in matters domestic, as in war, the Saxons were not original,⁴ and if many of the dykes of England be not Saxon work, then it

¹ Both these villages were originally clearings amid dense forests, Bernwood on the one hand and Whaddon Chase on the other. The dread of wild beasts and of man—Bernwood had a bad reputation, see p. 514, note—might call for defences of unusual size. But where are the similar defences of all the other villages of a like antiquity in this and similar localities?

² An article by E. Magnusson, M.A., in *Proceedings of the Camb. Antiq. Soc.*, No. xlvii. (1907), p. 480, shows that some of these northern peoples continued to construct partially subterranean dwellings to a late period, exactly as did the remoter Scottish peoples down to the last century or so.

³ Citing the recorded fact that the King's dwelling in the most important city of the realm in Saxon times (Winchester) was defended only by a hedge, Mrs. E. S. Armitage remarks that the lesser nobles were presumably content with even humbler defences, or with none at all.

⁴ Perhaps the greater number of such domestic works as existed were occupied, modified, and disguised by their Norman successors, or by the Saxons themselves under Norman influence. Of the vexed question of the date of the mounts, erroneously called burhs, something is said in the next chapter.

is impossible to point to any particular type of earthwork as being distinctively Saxon. A very few moats, larger or smaller, may be of their making,¹ and a few of the simpler ringworks of slight elevation and circular plan. Beyond this it is unwise to generalize. It is characteristic of the race to pay little heed to matters military ; it is characteristic of them also not to have accounted worth record the works of their own forefathers. They seek everywhere for the traces of the Briton and the Roman, but their own people and their fathers' house they forget.

¹ Mr. Chalkley Gould suggested that some of the larger moats of the East Coast, especially such as lie near to the heads of creeks and surround the entire village and its church, may have been originally constructed by the Saxons to defend their settlements.

CHAPTER XIII

NORMAN CASTLES

*“ When might was right, and sword and brand
Possessed and meted out the land—
Demesnes that he who built the strongest,
And only he, could keep the longest.”*

ALL over England, Wales, the Scottish Lowlands, and the Irish Pale are to be found earthworks of a type entirely unlike those heretofore described—mounds of earth ranging in size from 10 to 100 feet high and from 300 to 1000 feet about, surrounded by fosses, sometimes without any visible accessory works, sometimes associated with other fosses and valla of great extent and colossal proportions. Grouped under two classes by the Committee, these works (Classes D and E) appear to be but two stages in the development of one idea. The great majority, if not actually all of them, are the work of one people; they represent the military principles of the Normans, and were raised therefore during the space of some 300 years, from the days of Edward the Confessor¹ to the end of the thirteenth century.

Whether or no any of these mounds belong to an

¹ Throughout the reign of Edward the Confessor the Normans were making a peaceful conquest of the English. They introduced, *inter alia*, their peculiar form of castle, *castels* of the mount-and-bailey type. The *A.-S. Chronicle* mentions these *castels* once or twice: the first instance is *sub anno* 1048. To this period (pre-Conquest) are believed to belong

earlier date and another race is a question much disputed,¹ but there is no need to enter here into the arguments either way, for all parties are agreed that most of the mount-castles are Norman. They are scattered broadcast over Normandy and the adjoining districts; they are of rarer occurrence in Germany and Italy, and also in Denmark; but they are not found in the lands whence came the Saxon tribes, or in those parts of Ireland and Scotland to which the Normans failed to penetrate. Nor is it necessary to discuss the source whence the Normans learnt the style of fortification which they made their own.² The distribution of the mount-castles over the British Isles is at once too limited and too methodical to have been due to any conquest by Saxons or by Danes, and it is a peculiarity of their distribution that they were evidently intended not so much to defend a frontier or a locality as to overawe it. They are the means by which the Norman invaders secured their control over their English subjects. In a great number of cases they can be identified with fortresses of the building of which by the Normans we have documentary record. They bespeak a people who were mighty workers in earth, as the Saxons and the Danes were not. Next to the Briton the Norman

Pentecost's Castle and Ewias Harold. The *Chronicle*, clearly distinguishing them from *burhs*, speaks of them as a novelty. Ordericus Vitalis, the contemporary historian of the Conquest, expressly says that England at that date had few castles, this being one reason why the Normans found it so easy a prey.

¹ See various articles by Mrs. E. S. Armitage and Messrs. J. H. Round, W. H. St. John Hope, and others, in *Archaeologia* (vol. lviii.), *Archaeol. Journal* (lx.), *Proc. Soc. Antiq. Scot.* (xxxiv.), &c.; and in particular a careful summary of the case by Dr. Davies Pryce, reprinted from the *Journal Brit. Archaeol. Assoc.*, 1907.

² A tenth-century *Life of St. John of Thérouanne* states that the Merovingian nobles practised the same style of castle-building. The description of the completely developed mount-and-bailey castle, as given below, is almost identical with that attributed to the Merovingians. There is a theory that the mount is a development from the Roman *praetorium*, which has, however, nothing to commend it, and is based upon a wrong idea of the purpose and fashion of the *praetorium*.

has left the most enduring, the most numerous, and the most impressive marks upon our soil. He was as great a sapper as the Celt, as systematic and methodical as was the Roman.

G. T. Clark first made a study of these moated mounds. In lack of a better name he applied to them the Saxon term of *burhs*, and the name has unhappily stuck. In the *Chronicle* the term *burh* (or *burg*) is applied not to castles, and still less to castles which can be shown to have been of this plan, but to fortified towns.¹ The Normans themselves styled their mounts *mottes*,² and the name survives in Scotland and Ireland in the form *mote*. In England it has very often been confused with the two quite different terms *moot* and *moat*. The *motte* was never built to serve as a moot, though in the course of time individual examples may perhaps have come to be so used. The mere making of the mount, on level ground at least, entailed the excavation of a fosse, and so far every *motte* implies the possible presence of a moat. But whereas the word moat, in modern English, always implies the intended presence of water, the ditches of the *mottes* were not, save in rare instances,³ designed expressly to hold water. If they did so, this was as often accidentally as intentionally.⁴

¹ The Saxon burh was very much larger than any Norman castle. Even royal castles covered but a few acres—three or four—whereas a burh might extend to 20 or 25 acres, or more.

² The origin of the word is dubious. Dr. Christison remarks that the confusion between *motte* and *moat* is exactly parallel to that between *ditch* and *dyke*. The word appears in Welsh as *Môd*, in Gaelic as *Mhoid*. But the common Welsh term for such mounts is *Tomen* (=tumulus), and the Ordnance Map not seldom follows suit by marking as "tumulus" what is indubitably a genuine *motte*.

³ *E.g.* Clifford's Tower, York. In low-lying sites water would of course gather in the fosse, but the point is that the Norman of the Conquest rarely allowed this advantage to determine his choice of a site for his castle.

⁴ In certain obvious cases the ditches were of course intended to be wet, and the works were expressly designed to that end, but these are not as a rule castles of the mount-and-bailey type. There are examples at Porchester

In their simplest form the fortresses of the Norman conquerors were merely so many moated mounts.¹ The mount was in almost every case partially artificial : either it was constructed entirely of the materials excavated in making the fosse, or a natural hillock was scarped and worked into the desired shape.² The plan of the mount was usually circular, but frequently ovoid or elliptical, and occasionally almost rectangular. Its sides were made as steep as might be, and its summit was a level platform. On this platform stood the *bretasche*, a timber-built tower, the archetype of the later-day keep of stone ; and about it, following the edge of the platform, was carried a wall of earth with a wattled fence or a stouter stockade of timber. The only means of ingress and egress was a steep and narrow bridge of timber spanning the fosse, which was commonly of great width and depth ; and a second earthen rampart, likewise stockaded, ringed the fosse and completed the fortress.³ The fosse was more often dry than not, but in some cases it must have contained a great depth of water.

Clifford's Hill, Northants (Fig. 119), is amongst

(where the sea filled the fosses), at Newark (a thirteenth-century castle of which the moats were filled from the River Trent), and at Whittington Castle, Salop (where the stream which originally supplied the ditches is now too much shrunken to do so). There is a very large number of such riverine Norman castles, but even of this type there are many more which can never have depended upon wet ditches at all.

¹ There are examples of earthworks in Normandy, seemingly of early date, which have no mount, but, so far as England is concerned, such cases are the exception, *e.g.* Hedingham Castle, Essex, and Old Basing, Hants.

² The entirely artificial mount is perhaps the commonest of all ; the entirely natural mount is certainly the rarest. A fine example of the latter kind is to be seen at Corfe Castle, Dorset ; another at Montacute, Somerset. Castle Neroche (Fig. 13) is a good example of the intermediate variety, where a natural hill has been improved into a motte by fossing and scarping. At Maryport, Cumberland, is another.

³ In the Bayeux Tapestry is a representation of the fortress at Dinan, with motte, gate, bridge, palisades, and *bretasche* crowning the whole. It figures similar fortresses at Rennes and Dol and Bayeux, and the process of building yet another at Hastings.

the finer examples of mottes of the simplest plan. The mound has a diameter at the base of 300 feet, a diameter at the summit of upwards of 80 feet, while that of the whole circle included by the fosse is as much as 420 feet. On the other hand, Croft Castle, Winkleigh, Devon, is but 110 feet in diameter at the base and 20 feet in height, and Roborough Castle, Loxhore, Devon, with a base-diameter of 120 feet, is but 15 feet high.¹ In the

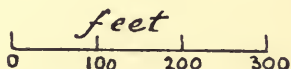
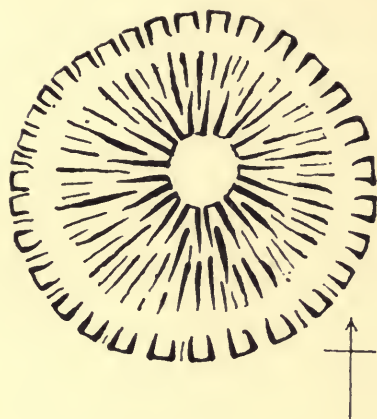


FIG. 119.—CLIFFORD'S HILL

smaller mounts the fosse is often scarcely traceable to-day, for not having been originally of any large proportions it has been quickly filled in by wastage, by ploughing, or by both agencies. Indeed, it must be remembered that cultivation may have obliterated the last trace of both fosses and base-courts alike, so that what is to-day seemingly a simple mount may once have been a fully developed mount-and-bailey fortress. At Bride-

stow, Devon (Fig. 120), the mount and fosse are perfect, measuring about 180 feet over all, and the vallum of one base-court, planned on about the same diameter, is well preserved. Holwell Castle, near Parracombe, is very similar, save that the base-court is in proportion larger.

¹ Small mounds of this kind are very numerous in many counties; indeed, many of them are so very small as to pass commonly for barrows. A mound in Mutton Wood, near Rochester, has an extreme height of 10 feet, a diameter at the summit of 16 feet, and a base-diameter about twice as large; while the ditch is nowhere more than 2 feet deep, and in places much less. But the level depression on the top, with its uniform breastwork some 4 feet high, sufficiently bespeaks the real character of the work.

Similar again is Durpley Castle, Shebbear (Fig. 121), with the addition that the vallum covering the outer edge of the fosse is intact. In all these instances the general outline is, as commonly, circular, but other forms occur. A very small example at Aslockton, Notts, locally known as Cranmer's Mount¹ (Fig. 122), has the plan of a narrow parallelogram divided into two courts, one of which is in effect a perfect square. Near Wembworthy,

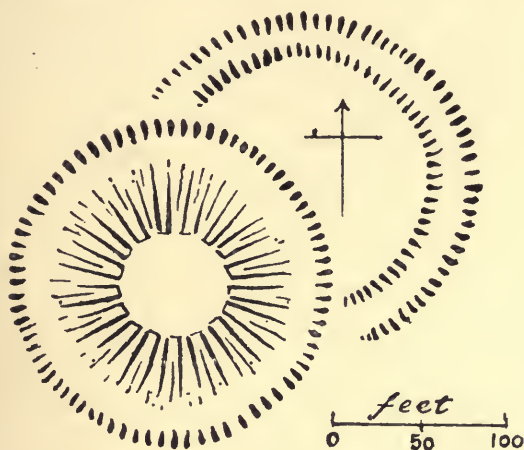


FIG. 120.—BRIDESTOW.

1½ miles from Chumleigh, Devon, are two examples of this type of work. The one has a narrow oblong plan, the fortress being so constructed (Fig. 123) as to be covered on one side by the natural fall of the ground to the river Taw, without need of further artificial defences. The other (Fig. 124), only 450 yards distant, shows the more common curvilinear plan, with a second and very exiguous base-court, so placed as to abut half upon the main base-court, half upon the mount. This

¹ Solely because the village happens to have been the birthplace of the great Archbishop. This is not an original work, but has been tampered with and converted into a moated homestead. Just as many of the mottes developed into stone-built castles, others sank to be manor-houses, halls, &c.

is the most usual disposition when there are two courts, and the plan is repeated in the far finer works of

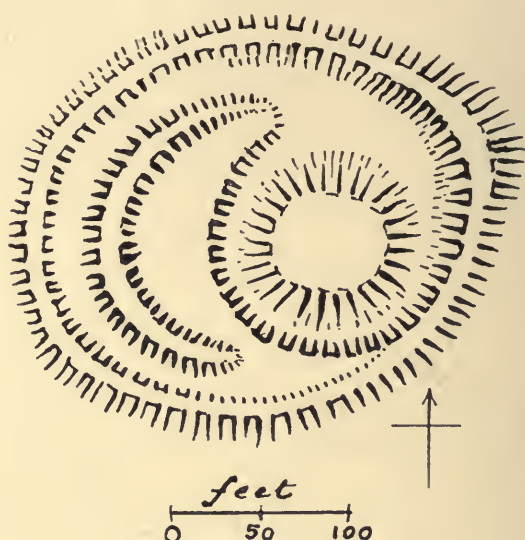


FIG. 121.—DURPLEY CASTLE.

Mexborough Castle, Yorks (Fig. 125), where the second court is again of very small size. The fosses here are

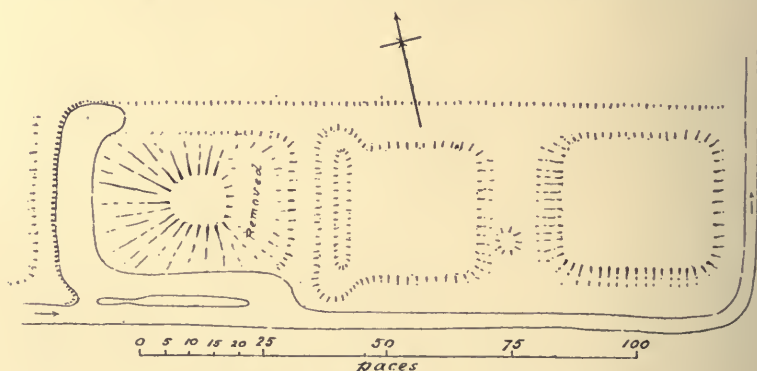


FIG. 122.—CRANMER'S MOUNT, ASLOCKTON.

very fine, but at Bulth Castle (Fig. 126), another very similar fortress, they are so large as to appear out of all

proportion to the areas enclosed. A different and less usual arrangement is seen at Ongar (Fig. 127), where the second court, now mostly obliterated, overlies the

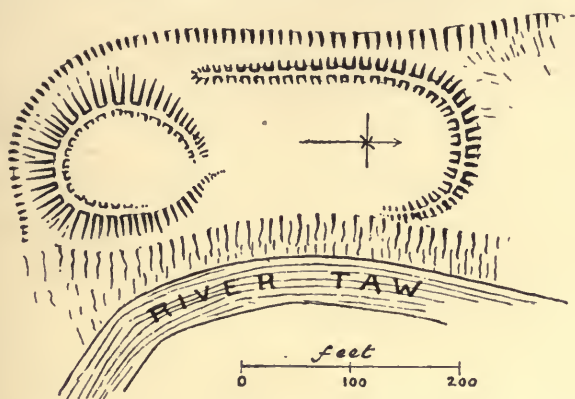


FIG. 123.—WEMBORTHY, No. 1.

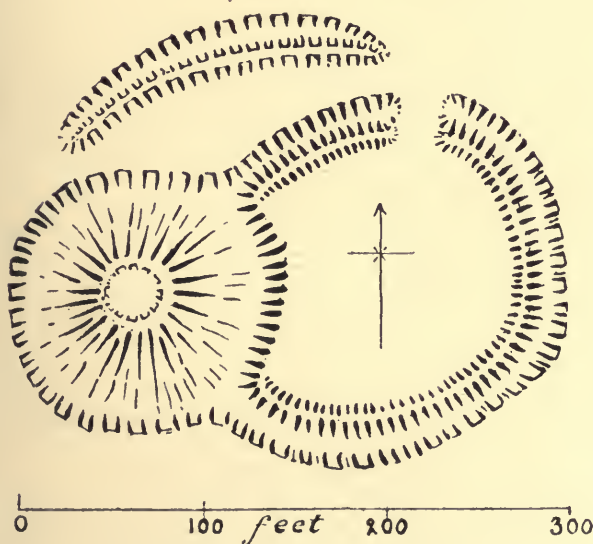


FIG. 124.—WEMBORTHY, No. 2.

first, exactly as that in turn overlies the mount. The splendid example known as The Rings (Fig. 128) or Blackdown Camp (650 feet), two miles north of Loddiswell,

near Kingsbridge, Devon, shows this arrangement in complete preservation. The outer court here embraces as much as 10 acres, and the slope of its containing vallum to the bottom of the outer fosse is in places fully 30 feet.

In the case of Nottingham Castle the same arrange-

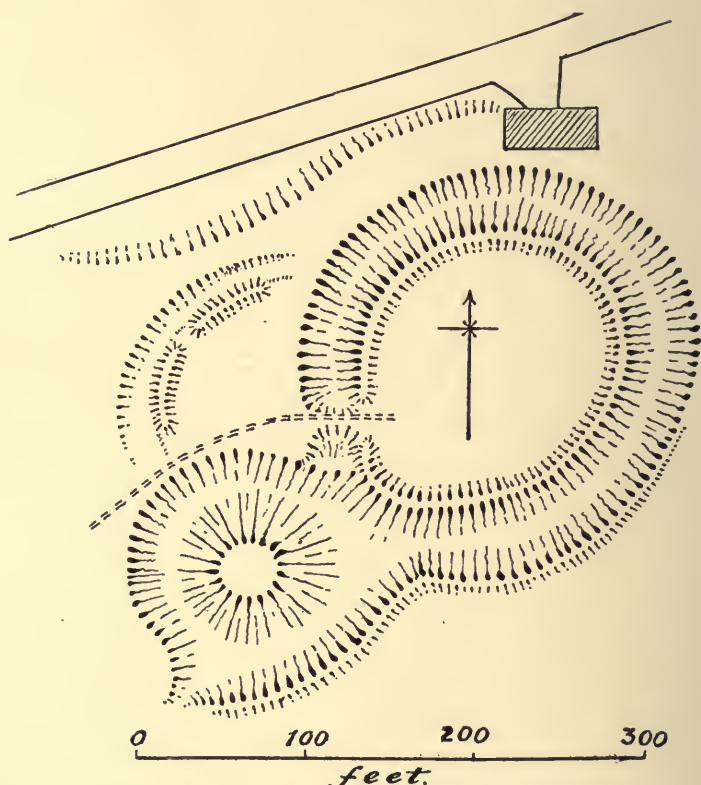


FIG. 125.—MEXBOROUGH CASTLE.

ment is to be seen, with the addition of yet a third bailey to the north. At Clun the motte occupies an angle of the river, and the three baileys, lying side by side, cover the approaches from the east, south-east, and south. At Whittington Castle, Shropshire, the arrangement is the same. In Montgomery Castle there are as

many as four courts arranged in line from north to south, their peculiar disposition determined by the form of the narrow ridge which they occupy.

It will be noticed that in all the plans heretofore given, the mount is so placed that its fosse forms part of the

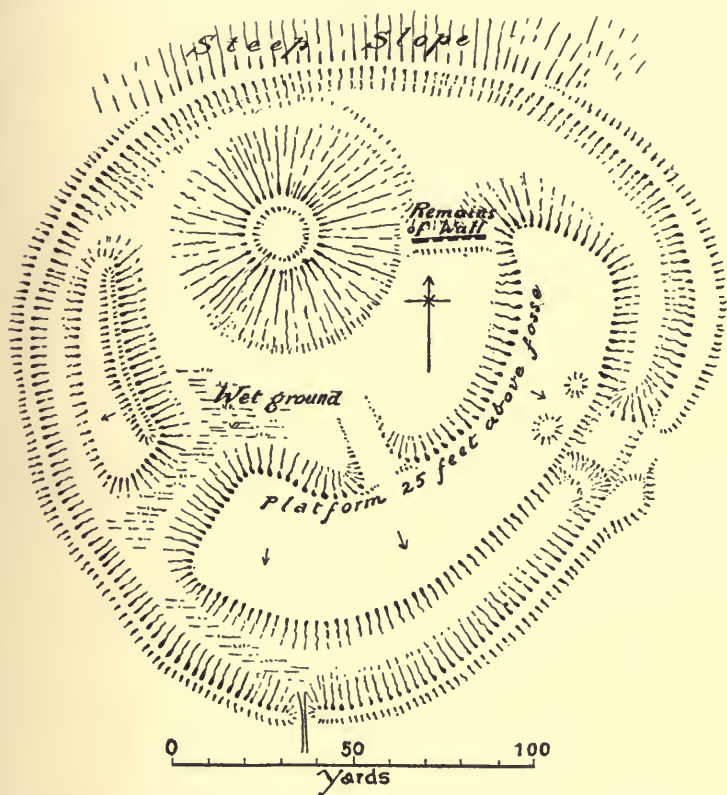


FIG. 126.—BUILTTH CASTLE.

outer ceinture of the defences. This was certainly the normal position, and arises naturally from the gradual development of the design. Where exceptions occur they will probably be either the result of the adaptation of pre-existing earthworks, or constructions of a late period, marking the transition from the true mount-and-

bailey fortress to a later scheme of fortification. Where a Norman castle is found at a town which was itself

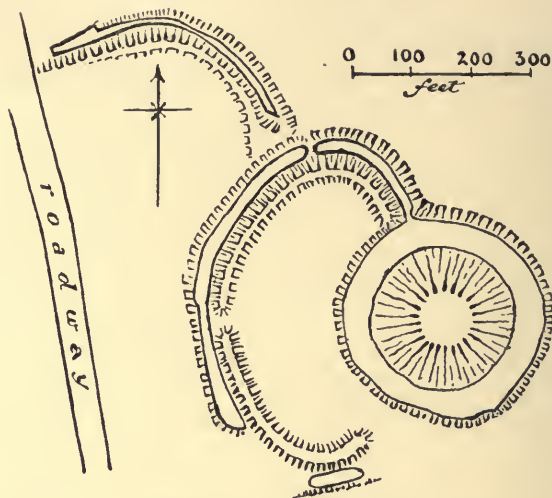


FIG. 127.—ONGAR CASTLE.

already fortified, *e.g.* at London and Lincoln, it commonly occupies an analogous position in relation to the defences

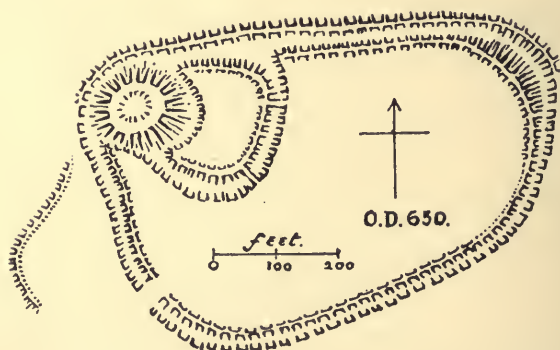


FIG. 128.—THE RINGS, LODDISWELL.

of the town, *i.e.* it is situated not within, but on the line of, those defences, so as to form an essential part of the entire enceinte of the town.

The fort (Fig. 129) known as Cymbeline's Mount,¹ in the grounds of Chequers Court, Bucks, is a fairly perfect specimen of its class. The mound, about 160 yards in circumference and 25 feet in height, with a slight fosse only, stands at an elevation of 500 feet on the extremity of a spur of the Chilterns which falls abruptly in front to the left

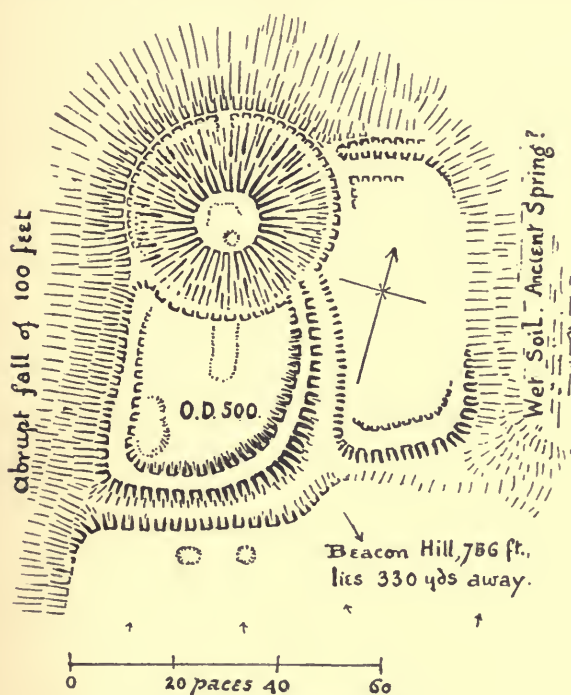


FIG. 129.—CYMBELINE'S MOUNT.

(west). The slope to the right (east) is gentle, and in the rear the ground is almost level, rising presently very rapidly to the height of 756 feet (Beacon Hill). The main bailey lies in the rear of the mound, a small court of some 30 yards

¹ So called on the Ordnance Map and by most of the people of the neighbourhood. There is, however, an alternative name, Kimble Castle, sometimes applied to it; and others of the natives insist that what is in the text called Cymbeline's Mount is properly called Kimble Castle, and that the name of Cymbeline's Mount strictly belongs to a considerable tumulus, now planted with trees, which crowns Beacon Hill.

across either way, its peculiar shape and small size determined by the lie of the ground. The vallum and fosse are bold to the right and rear. To the left no ditch was needed, and along the side abutting upon the fosse of the mound there is as usual no vallum. Attached to the right side is a second still more exiguous bailey of narrow plan, ditched and banked where it leans upon the main work and at either end, but showing upon its outer (eastern) side no trace of any defences. This side flanks a slight depression in the side of the hill, where obviously was once a spring, and if any defence existed here it may have been nothing more than a slight scarp. The soil of the main bailey is black, full of very small fragments of pottery of the thirteenth to fifteenth centuries, intermixed with oyster-shells. The mound is apparently entirely artificial, and its small summit only provides an area of some 15 yards across. Immediately outside the bailey, upon the surface of the level ground in the rear, are two shallow circular depressions, and a third of larger size lies a few yards further to the south. Upon the actual crest of Beacon Hill close to the flagstaff is yet another, and up to the flagstaff from the direction of Ellesborough runs a considerable ditch covered by a bank on the western side. Another ditch and bank, precisely similar, run up the steep slope of Combe Hill beyond the valley.

For the association of the works with Cymbeline or Cunobelin there is of course no authority save tradition, but that the association is of considerable antiquity is proved by the fact that the adjacent villages of Great and Little Kimble appear in very early records as Chenebelle, Cunebell, &c. Tradition further declares that at or near this spot were killed two of Cunobelin's sons fighting against Aulus Plautius, 43 A.D. As they stand, however, the works have nothing British about them, and excavations made here in 1858 seem to have produced only negative results. But it is curious to find that there are the

remains of another mount-and-bailey fortress upon a much larger scale some 500 yards westward at a spot close beside the old Icknield Way. Here a spring, which rises some 100 feet lower than that which once covered the north side of Cymbeline's Mount, crosses the old road; and immediately upon its western bank rises a second and much larger mount, oblong in shape, measuring 50×40 paces, and some 18 feet in height. The original fosse is still distinctly traceable, as well as the remains of an inner and an outer bailey.¹ Unfortunately these works, lying upon good soil and close to the highway, have been sadly defaced by subsequent buildings and by cultivation. Within the same field lay the manor-house of Little Kimble, until its final demolition about 1830, so that upon one and the same spot are to be seen the *vestigia* of successive manorial residences from the time of the Normans to the last century—the mount-and-bailey fortress, the mediæval moat, and the foundations of the post-mediæval building. Possibly the original fortress of Cymbeline's Mount was replaced by another, whether because the lord required more space, or because he desired a better water-supply, or for some other reason. Cases in which the remains of two fortresses of this type are found in close contiguity are not rare: three examples occur, for instance, in Devonshire: at Bridestow, at Wembworthy, and at Buckerell Knap, Honiton; and in the two former cases at any rate we have a smaller work side by side with a much larger one, exactly as at Little Kimble.²

¹ See the plan on p. 476.

² At Aldingham in Furness is another example of a mediæval moat standing side by side with a mount-and-bailey fortress, and as at Kimble the moated site is very small, barely 100 feet square, though the moat is as much as 36–40 feet across. The mount, it is suggested, “was the *caput* of the Manor of Aldingham, and for shelter the lords removed their wooden house to the square camp, which, according to tradition, is the site of Aldingham Hall.” Swainson Cowper in *Archæologia*, liii. For Buckerell Knap, see p. 86, note.

The new comers were not above utilizing the work of their predecessors where this was practicable. With Saxon works there was frequently nothing to be done; they were too large in area, and if the Normans built castles at such spots at all, it was either an independent

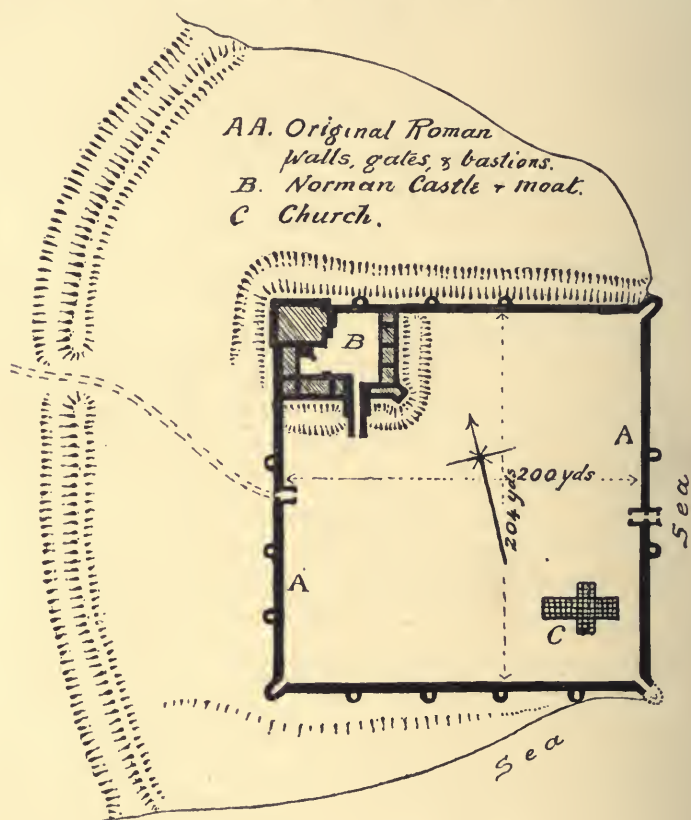


FIG. 130.—PORCHESTER CASTLE.

fortress upon the line of the Saxon walls—space being obtained by demolishing the houses—or it was immediately outside. Of the adaptation of Roman earthworks,¹

¹ A mount-and-bailey fortress at Little Wymondley, near Hitchin, stands in a rectangular enclosure, within which have been found Roman foundations

with more or less modification of the original plan, there are many examples, *e.g.* Porchester (Fig. 130), Pevensey, Chichester, Leicester, Lincoln, and Brough. A moated mound at Beaumont, Cumberland, is said to have been constructed out of one of the mile-castles of the Roman Wall. At York, on the other hand, although the Roman

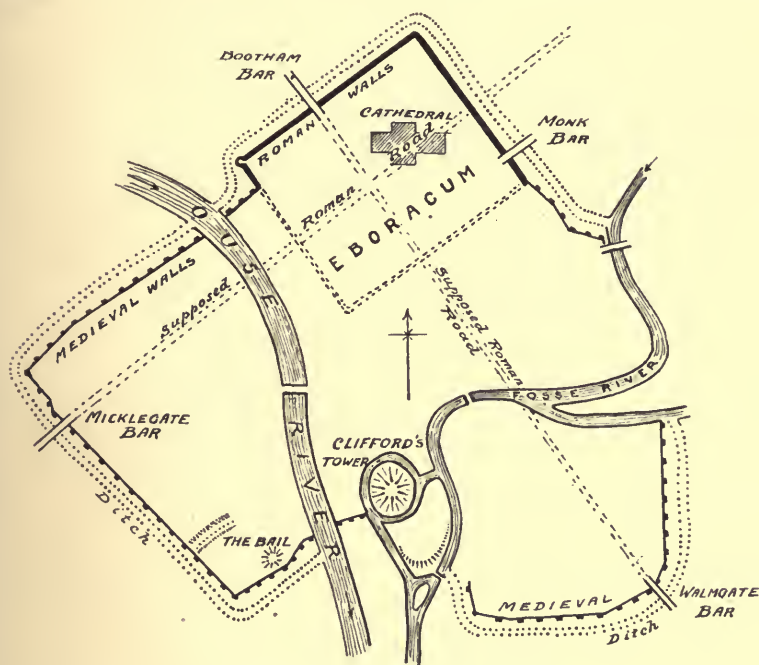


FIG. 131.—DEFENCES OF YORK.

defences were formidable, the Norman fortresses—there were two on opposite sides of the river, now represented by the mounds of The Bail and Clifford's Tower—were built some distance away to the south (Fig. 131). In some cases a British work has been adapted, as at Old Sarum (Fig. 27), probably at the Herefordshire Beacon (Fig. 28), and elsewhere. Hembury Castle, Buckfastleigh (Fig. 132), a fine kidney-shaped camp 540 feet above sea-level, surrounded by two valla with an inter-

vening fosse, is to all seeming a British fortress of a familiar plan, and within it have been found bronze implements, sling-stones, &c., but at the western edge of the area, abutting in characteristic Norman fashion upon the enceinte, is a ditched and ramparted mound of the usual pattern, measuring upwards of 220 feet in diameter over all. The local name for the whole work is the Danes'

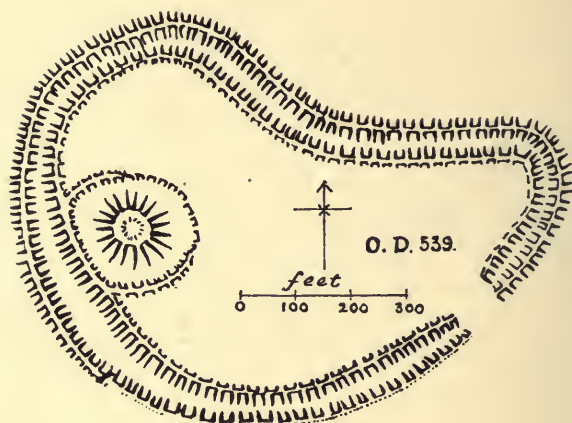


FIG. 132.—HEMBURY CASTLE, BUCKFASTLEIGH.

Camp. There appears to be no reason to suppose that any such appropriation has occurred at Totternhoe,¹ in

¹ Fortresses of this class gave much trouble to the antiquaries before their recognition as Norman works; and Totternhoe, with its circular mound and its rectangular court, was sometimes styled a British camp, sometimes an example of a rectangular Roman camp superadded to an earlier British mound. The peculiar shape of the court here is simply due to the natural contours of the position, exactly as at Cymbeline's Mount. At any rate it is unlikely that the site (524 feet) was ever occupied by any permanent military post of the Romans, and the existing remains are too formidable to represent temporary works of that people. To the north and north-west of the mount are certain pits and other inequalities of the ground which have been alleged, apparently upon no adequate evidence, to be hut-circles. A precisely similar supposition was made, with as little reason, in regard to Castle Neroche. Attached to the mound at Bletsoe, Bedfordshire, are the remains of a perfectly rectangular court of approved Roman plan, but there is no reason at all to think that it is really Roman work.

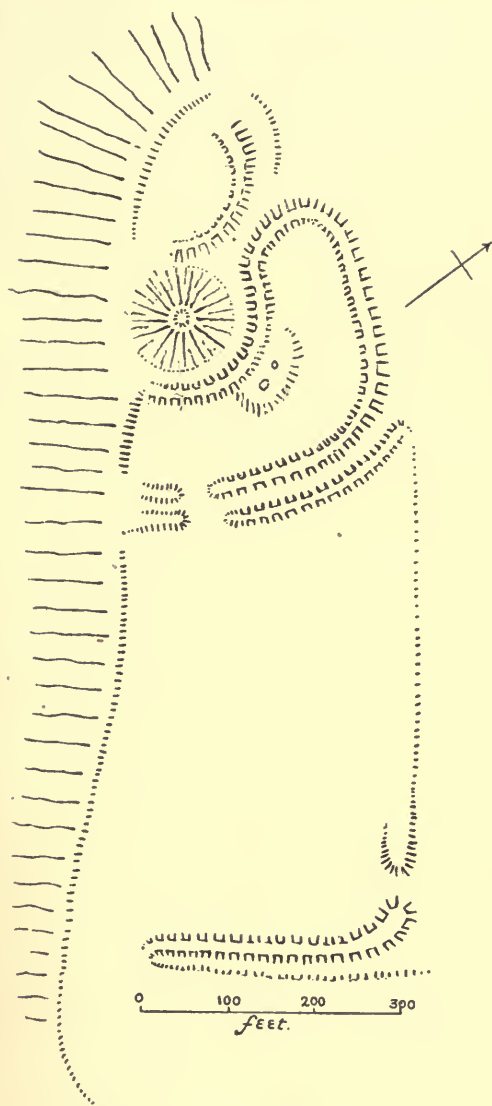


FIG. 133.—TOTTERNHOE.

Bedfordshire (Fig. 133). Berkhamstead Castle is another doubtful example, as also the curious camp on Edburton Hill, Sussex (Fig. 216), described in another chapter.

Yet another case is that of Hembury Fort, near Honiton (Fig. 12). But the case of the so-called Cæsar's Camp, Folkestone (Fig. 134), shows how unwise it is to hazard guesses about the age of such earthworks. By the vulgar dubbed Roman, by the others held to be British, this was conclusively proved by Pitt-Rivers' excavations to be no older than Norman times, and not necessarily very early Norman times.

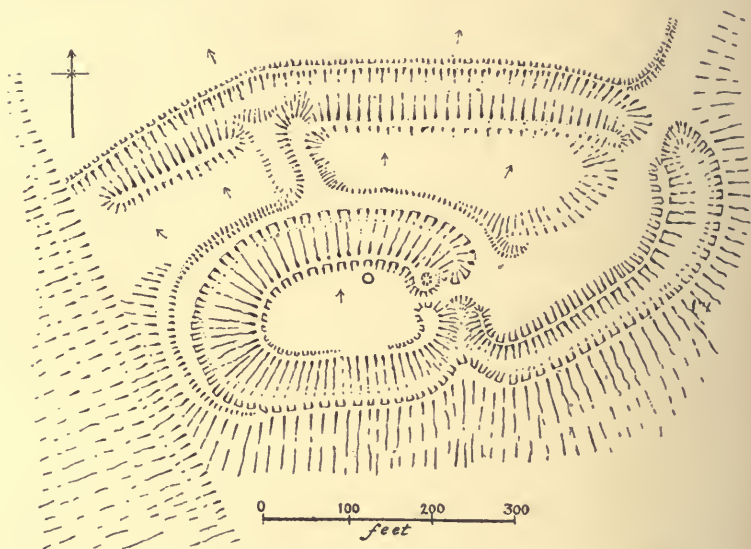


FIG. 134.—CAESAR'S CAMP, FOLKESTONE.

Here and there occur exceptional earthworks in which not the mount only, but an entire base-court, is artificially raised considerably above the natural level. There is a curious example in Swerford Castle, near Chipping Norton, where the single circular court now remaining, surrounded by a vallum 3 feet or more in height, is itself many feet above the original ground-level; while the motte is represented perhaps by an enlargement of the vallum, which rises at the eastern side of the single entrance some 8 feet above the floor of the court, without any trace of a fosse.

Its summit measures some 30 feet in diameter. The earthwork called Castle Toll (Fig. 135), near Newenden, Kent, seems to be another example. A glance at the plan will show that it is certainly, in its present shape, the remnant of a mount-and-bailey fortress, but the whole

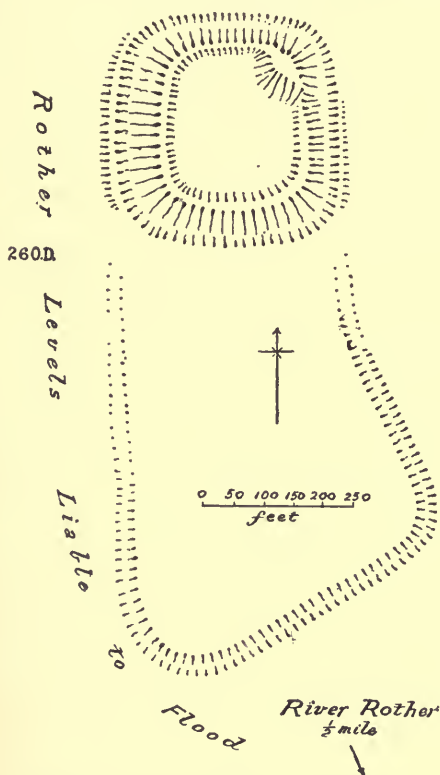


FIG. 135.—CASTLE TOLL, NEWENDEN.

of the main-court is artificially raised, and the motte is non-existent, unless a slight exaggeration of the containing vallum at the north-eastern corner be taken to represent it. This, again, had no fosse.¹ With Castle Toll should

¹ Castle Toll has constantly been cited as an example of Danish work, but on no sufficient grounds, though the Danes are said to have *destroyed* a castle which stood at Newenden in 892. In 1210 was settled a suit concerning

be compared the works, to be described later, at Topcliffe (Fig. 151), where the mount is of much the same character and position, and those at Gannock's Castle (Fig. 113).

For the size of these Norman fortresses there is no rule at all. The mounts vary in circuit from less than 300 feet to more than 1,000 feet, in diameter from 80 feet or less to more than as many yards. Their height may be as little as 12 feet, or as much as 100 feet. That at Mount Bures, Essex, is 80 feet in height. The base-courts vary as widely. The main court at Cymbeline's Mount is only 115 paces in circuit, the other about 130 paces; while the inner court at Loddiswell covers an acre and the outer bailey as much as 10 acres.¹ The ditches are not more uniform in depth and width, and the valla are indifferently within the fosses, outside them, or on both sides alike. The mount is usually very steep, even when entirely built up of made earth. The great mount at Thetford, Norfolk, 100 feet in height and 1000 feet about, is so steep as to be almost inaccessible. At Laxton Castle, $2\frac{1}{2}$ miles from Tuxford, Notts, the finest work of its class in that county, the mount—90 yards in diameter at the base—rises with a scarp of 70 feet to form a platform some 45 yards across, in the centre of which is a second mound, about 15 yards in diameter at the base and 8 feet in height. In most instances the vallum which originally surrounded the summit has entirely disappeared, but where it is still preserved it varies from the slightest breastwork to an enormous wall. In Croft Castle, Devon-

certain manors in Sussex and Kent, one of them at "Newendun." Is Castle Toll perhaps the representative of that manor? On the banks of the Roding, at Barking, there used to be another earthwork rudely square in plan, with a considerable mound at one corner. This, like Castle Toll, used to be attributed to the Danes. But Castle Toll has also been classed as a British *oppidum*.

¹ The average size of the royal castles of William I. is said to have been about 4 acres. In the Irish Pale many of the mottes are accompanied by curiously small baileys, an indication of the small numbers of the men-at-arms following the lord in this conquest.

shire, it is flat on the top, 6 feet in width, rising 12 feet above the level of the area within; whereas in Roborough Castle, a work of much the same size and of apparently the same date, it is but 7 feet high.

Situated in the great majority of cases on levels actually or relatively low, oftenest in the midst of a town or village, and rarely beyond the limits of the arable land, and built up in many instances of gravel or of good rich soil with no admixture of stone, these works have too often suffered more serious damage than works of far greater age. Many of them have been levelled and their materials spread over the fields, just as have so many barrows of older date. Often there remains nothing but a sadly diminished mound, the plough having obliterated not only the walls and fosses of the courts, but even the great main ditch of the mount. Of their once formidable wooden defences no trace remains at all, and later generations, using the mount commonly as a playground or a viewpoint,¹ have trodden an easy pathway up to its summit. The mound at Barnstaple is now ascended by a spiral pathway too regular to be of other than purposed origin, but certainly no part of the original design.² The timber bridge which once formed the only means of access was naturally soon destroyed. G. T. Clarke cites from the *Acta Sanctorum*³ an amusing illustration of its perishable

¹ To this refers the word "toot," seen in such names as Toothill, Tuthill, Tutbury, Beltout, Tothill Fields, in the Welsh Twt, and perhaps in Totternhoe, the original being related to the Anglo-Saxon *tutta*, "a spy." At Egmonton, Notts, only a mile from Laxton Castle, is another motte, with slight traces of attached baileys. This used to be the scene of village games every Shrove-tide. Its local name of Gaddick's Hill recalls that of The Gannicks (Gannoeks Castle), Tempsford.

² In Southover, Lewes, is a similar mound some 40 feet in height, with a spiral ascent, standing within the precincts of the once great Priory of St. John. It is said (without any authority) to have been formed out of the soil removed in making the fish-pond of the Priory, and to have been utilised as a Calvary. What was once the fish-pond is now known as the Dripping Pan, a level sunken area large enough to serve as the county cricket ground. ³ *Medieval Military Architecture*, chap. ii., Appendix.

character: the bridge of the motte at Merchen in Dixmude gave way beneath the weight of one Bishop John (*obit* 1130) and precipitated him and his followers to the bottom of the ditch, five and thirty feet below, "with great force and noise." That the wooden defences were easily destructible is shown also by the constant allusion, in records of the eleventh to thirteenth centuries, to the purposed or accidental burning of "castles"; and only in this way is to be explained the assertion that King Henry II. destroyed hundreds¹ of unlicensed or "adulterine" castles during his reign. In a timber-built castle fire would in a few hours achieve the work which, in the case of a stone-built fortress, would have entailed months of labour. But as they were easily destroyed, so they were easily constructed. The enormous growth of unlicensed castles in King Stephen's time is only to be understood on the supposition that most of them boasted only wooden defences.

Some of these mounts have been altered in far later days for military purposes. A number of them were reconstructed and remodelled in the time of the Civil Wars according to the altered military practice of the time, *e.g.* Cambridge Castle. Another at York, "The Bail," was utilized at the same date as a gun-platform, just as was the Derry Mount outside Nottingham Castle, originally a tumulus, and in no sense a Norman construction.² There are, however, known instances in which ancient barrows have been utilized by Norman builders and converted into mottes.

Often the lapse of time has reduced what was an original motte to the appearance of nothing more formidable than a barrow, and the Ordnance Map not seldom endorses popular misapprehension by marking such mounds as

¹ One version says 375, another 1115; but even the smaller number would be past belief if the castles had all been built of stone.

² It was destroyed in 1781.

tumuli. The Beacon at Cublington is an instance ; another, in all probability, is Ailey¹ Hill, Ripon (Fig. 136). This is a considerable mound, 60 feet in height, just east of the Minster. Human bones having from time to time been found in or on it, there has grown up a cherished belief that the entire hill is "made of bones," the burial-mound of the victims of some mighty battle, "the memorial of some terrible carnage"; and the slight similarity of name has given rise to the groundless assertion that it covers the bones of King Ælla of Northumbria and those who died with him in the ninth century. But there is no reasonable doubt that this, too, was a Norman² castle-mound, albeit every trace of fosse and base-courts has disappeared; and the human bones within it were probably brought there in one or other of the many reparations of the Minster and the periodical clearances of the charnel-house.³ There are distinct traces of later

¹ "Ailey" on the Ordnance Map. In actual speech this is pronounced "Ailsa," with conscious or unconscious reminiscence of the Scottish name. In the eighteenth century it was "Hillshaw," and in Leland's time "Ilshow"; while earlier still it is said to have been "Elveshou," *quasi* Fairies' Hill. Leland had a glimmering of the truth when he wrote that "by all likelihood" there had here been "sum grete fortres (of the Britons)."

² The manor was given at the Conquest to the Norman Thomas, ex-Canon of Bayeux, successor to the Saxon Ældred in the Archbishopric of York. It was subsequently a favourite residence of various archbishops until the Palace at Bishopthorpe, York, was built. There are some small remains of their residence at Ripon, at the north-west corner of the Minster, and behind it stood in Leland's time a second mount, "lyke the kepe of a castel." It was known as Allhallows Hill, but its site is now a gravel-pit. With these two mounts so placed that "one standith directly set agayn the conspect of the other," compare the two in Lewes Castle (p. 435), and those at York (Clifford's Tower and The Bail).

³ Records of such removals of bones are common in the Fabric Rolls, *e.g.* *sub. ann.* 1520, 1521, 1522, 1523, 1525 (when one of the aisles was in building); and in 1505 the large sum of 24 shillings and 6½ pence was paid out for such "carriage of bones." Apparently they were dumped anywhere, for not only does the whole west end of the Minster rest upon a large bone-ground, but bones in quantities underlie all the soil about, *e.g.* St. Agnes' Gate. Where this street is opened, the sub-soil is literally made of bones, and it is quite possible that the street lies in part along the line of the original fosse of Ailey Hill, which was deliberately filled up by the help of bones

modifications of the mound, apparently for military purposes, in the course of which were formed the circular

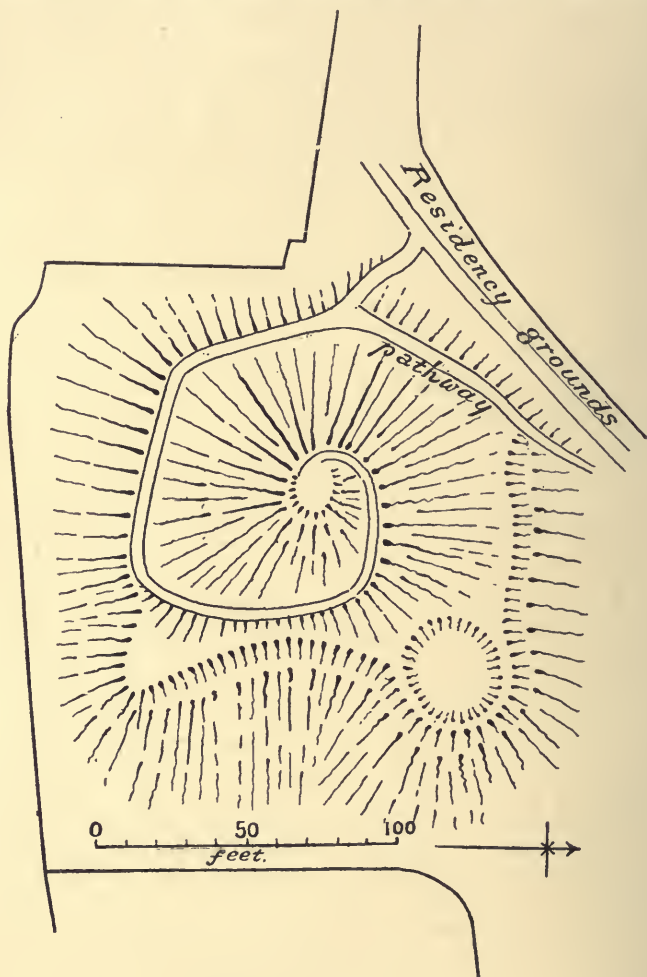


FIG. 136.—AILCY HILL.

depression in its north-eastern shoulder, and the bastion-like platform to the south-east.

from the charnel-house. There is record of the finding of many early Saxon coins near (not *on*) the mound, and a quantity of harness within it. But that the bones found on it are no relic of any bodies buried under it is proved by their being all on the surface.

Col. W. L. Morgan has explored a mount-and-bailey fortress known as Old Castle Camp, Bishopston, five miles south-west of Swansea.¹ The mound is small, rising but fifteen feet or so above the original bottom of the fosse. The fosse, which had a V-section, surrounded three-quarters of the mound, the other side being sufficiently protected by the steep fall of the ground to the Bishopston stream. Outside the fosse lies a broad vallum, with a relief of some 6 feet only, but a breadth of 25 yards over all. Outside this was another shallow fosse 22 feet wide, and there are some small remains of a base court attached to one side. The platform is provided with a low parapet, and a trench dug across it revealed the socket-holes of a series of posts which had evidently encircled the whole of the summit. The posts which had filled these holes had of course perished, but it was possible to make out their measurements. The average was about three inches square only, and they had been driven into the soil no deeper than from 2 feet 3 inches to 2 feet 8 inches. They were altogether of too slight a character to have constituted in themselves any defence, and Col. Morgan was led to believe that the real ceinture of the platform had been a mud wall, to the interior face of which these posts had served as a revetment only. He concluded also that this fortress represents the last phase in the development of its type of earthwork—a phase in which the chief weapon of offence was the bow,² and the main defence not the mount and its *bretasche*, but the disproportionately broad vallum surrounding it,

¹ Another at Penwortham, Lancashire, was explored as long ago as 1856, when there were found the foundations and cellarage of the original *bretasche*, which had been surrounded by an outer ring-wall of wattles. The broken stumps of the main timbers of the *bretasche* were found *in situ*.

² The bow as a military weapon, remarks Colonel Morgan, was introduced into England by the Danes. The Normans were experts in its use, but the English presently made it *the* national weapon.

every part of which was within easy bow-shot from the platform.¹

As a rule the mount-fortresses, like their lineal descendants the stone castles, stand at wide intervals apart. Cases to the contrary occur, however, and these may be explained perhaps partly upon the analogy of the occurrence of more than one manor-house in a single parish or village, more frequently as works of different dates. Where there is found a larger work of the kind side by side with a smaller, it is reasonable to suppose the latter to be the older and original dwelling of the lord, subsequently transferred to a more advantageous site or re-built upon a more commodious scale, whether by his successors of the same blood or by some later grantee of the lands adjoining. Thus side by side with the small mount at Bridestow are the remains of another of far greater extent, and the two mounts at Wembworthy, though less markedly different in extent, are an analogous case. The mount at Little Kimble apparently bears the same relation to Cymbeline's Mount.² Those at Bushy Knap and Buckerell Knap,³ near Honiton, are possibly contemporary works analogous to duplicate manor-houses.

In a preliminary list of moated mounds published in 1889, G. T. Clark⁴ enumerated 283, of which all but 18 are English. That list, though necessarily very far from complete, gives a very fair idea of their general distribution. In the three northern counties of Northumberland, Cumberland, and Westmorland they are scarce, exceptional in Dorsetshire, and in certain other of the

¹ The excavations produced little in the way of "finds" excepting pottery. This was very fragmentary, like that to be picked up at Cymbeline's Mount, and like that also was much of it so rude in type as to resemble the fragments of Celtic burial-urns. Yet there can be no doubt that it was contemporary with the fortress, and that the fortress itself is of quite a late date amongst its kind. See *Arch. Cambrensis*, vol. xvi., 5th Series (1899).

² See p. 413.

³ See p. 86, note.

⁴ "A Contribution to a Complete list of Moated Mounds," in *Archæological Journal*, xlii., p. 139.

midland and southern counties are sparsely represented ; but elsewhere they are decidedly numerous, in Devonshire, along the Welsh Marches, and in the Eastern Midlands particularly so. In Scotland Dr. Christison has counted 69 probable and 72 possible mounts, and remarks that "in a general way they may be said to be thickly clustered in the Stewartry of Kirkcudbright, and to thin out rapidly to the east and north, and more slowly to the west."¹ North of the Forth they are very few, and in the Highlands there occur but two possible examples, both very doubtful. In Ireland they are common all over the English Pale, and especially large and frequent in East and West Meath.

The use of masonry in England, which seems so completely and inexplicably to have gone out with the Romans, was very slowly revived, and mainly in the interests of the Church. The earliest known examples of Anglo-Saxon mason-work are exclusively ecclesiastical—churches and monastic buildings—planned only upon a very small scale and executed with very little skill.² It is only quite late in Saxon times that we hear of the revival of masonry in fortification, *e.g.* in repairing the older Roman walls of towns such as Colechester, Cambridge, Oxford, Chester, Exeter and London ; and to judge from the available evidence the work was still rude and unskilful.

A still later development was the building of burhs, *i.e.* the fortification of towns with new walls of masonry after the pattern furnished by Roman works still surviving. For the building of actual castles, that is, fortified dwellings of masonry, in genuinely Saxon times,

¹ *Early Fortifications of Scotland*, p. 17.

² Amongst very early examples is the original crypt of St. Wilfrid, under Ripon Cathedral. This is said to have been the work of masons brought over from Rome, and it is a fact that the mortar or cement used in the flooring is mixed with pounded brick in the Roman manner. There are discernible on the walls traces of a sort of hard-polished plastering, which is apparently identical with that to be seen in the ruins of Pompeii.

there is little or no evidence. Such an application of the mason's craft was reserved for the Normans, and wherever there is to be found masonry of pre-Norman date in Britain other than ecclesiastical, it is almost exclusively Roman work, embodied perhaps in some later building, *e.g.* in the Castles of Pevensey and Porchester, and in the walls of London, Lincoln, Leicester, Bath, and York. Even of Norman masonry, other than ecclesiastical, there survive very few examples attributable to an earlier date than 1087,¹ and of our scores of stone castles the vast majority date only from the reign of Henry I. or later. The construction of a castle of stone was a labour of time, leisure, and means, as well as of skill. It is to be doubted whether there were available many craftsmen competent to undertake such work in the first rush of the Conquest; it is certain that all the other essentials were lacking. So soon as the stern work of conquering the island was accomplished—and it was no easy task when all is said—William set himself to rivet his fetters upon the land by means of castles of stone. But until that time he was content to erect castles of earth and timber only, of the approved mount-and-bailey type; and as did the King, so did his lesser nobles, each according to his means and the number of his retainers. The first castles were mostly small, but their plan was such as allowed any reasonable amount of expansion by adding further baileys. But it is quite a mistake to suppose that every moated mound grew up to be a stone-castle. Scores of them never saw any masonry at all. Lack of means, the gradual disappearance of the need for such fortresses, and the jealousy with which the Crown restricted the right to build them, combined to leave many of the original mounds as they were first thrown up.

¹ To this date belong, it is believed, the oldest portions of Colchester Castle and of the Tower of London. Parts of Richmond Castle, Yorks—chiefly of herring-bone masonry—may be as early as 1068.

There was a further difficulty. The weight of stone-built towers, or other great masses of masonry, is too great to be carried on made earth, and as the mounds were almost always artificial, they would not at first carry towers of masonry. The soil required to settle, and this was a matter of some years, so that wherever the builder had a clear field to work upon, he preferably dispensed with the mound altogether, and in place of the wooden *bretasche* upon its heap of earth, he built a massive and lofty keep of stone upon the natural surface, adding thereto stone-walled courts or baileys analogous to those hitherto wrought of earth. If he was called upon to fortify with masonry some mount-and-bailey castle already existing, he substituted for the wooden tower a similar tower of masonry, commonly a four-square, or at any rate rectangular, block complete with its several floors and roof, more rarely circular, and only in exceptional cases a mere shell-keep open to the sky. A structure of this kind retained all the advantages of position, with the additional virtue that it was proof against fire. Of more than forty castles erected by William I. and Rufus the greater number have no mounds at all, and they show, moreover, a decided preference for a rectangular plan, wherever the position permitted it. Otherwise the outer walls took whatever course the site required—triangular in many cases, *e.g.* Hastings and Carlisle, or even octagonal, *e.g.* Oxford. But the older type of castle, of earth and timber only, continued to be built, or rebuilt, until the end of the thirteenth century and even later.¹ Many of them, when at last by royal license converted into castles of stone, retained still their original exiguous dimensions.

¹ Such a castle, on the bank of the Loughor at Llandilo, Talybont, is known to have been "destroyed" in 1215, and again fortified as late as 1353; *i.e.* its *wooden* defences were first dismantled and again restored in those years.

How very little masonry was needed to turn the mound into a formidable castle is illustrated by the example of Richard's Castle (Fig. 137), a border-fortress of Herefordshire. Situated in a position of very great natural strength,

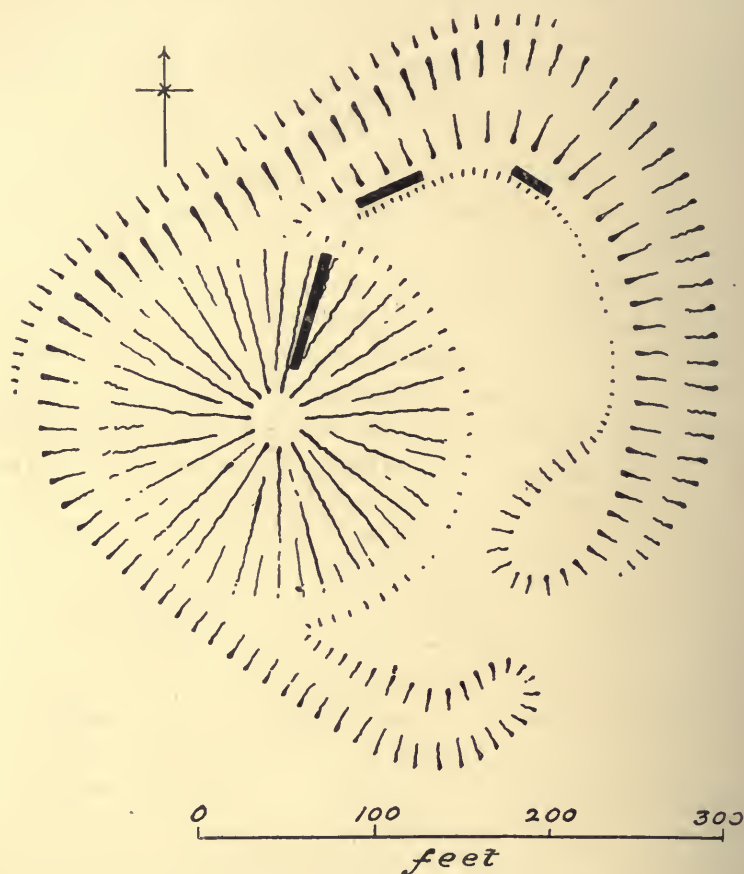


FIG. 137.—RICHARD'S CASTLE, HEREFORDSHIRE.

and protected on three sides by the slope of the hill-sides or by deep water-courses, the castle itself is simply a mound of 60 feet in height, its summit 30 feet in diameter, and its sides, now heavily wooded, extremely steep. Around its base runs the usual fosse, very broad and deep, and to

the east lies a small base-court protected by the normal *agger* and fosse. Upon the summit of the mound once stood a stone keep, and on either side a curtain-wall ran down the slope and across the fosse to the outer *agger*. Along the *agger* the wall was continued round so as to include the base-court. No plan could well be simpler, yet it was a castle of very great strength, especially as its keep, 300 feet above the levels below, commanded a vast expanse of country. The place is further interesting because of its history; its eponym was Richard FitzScrob, a Norman member of the Court of Edward the Confessor. There must therefore have been a fortress of some sort on the spot before the Conquest, but the masonry can scarcely date from that period. Small as it is, it can never have been a residential castle so much as a frontier-post; and the constant unrest of the Welsh Border for many a year after the Norman Conquest prevented the building of any but strictly military works along the March. Other mounts or mount-and-bailey forts of the Border are to be seen at Clun, Ewias Harold, and Kilpeck, and beyond the Border are many others scattered about the Welsh valleys, amongst the best known being that at Bala (Tomen y Bala).

The fortress known as John o' Gaunt's Castle (Fig. 138), near Fewston, in Knaresborough Forest, is another example of the addition of masonry to a moated mound of the simplest type. It is very small, barely fifty yards across, and the inner stronghold measures only about twelve paces each way. The building can never have been much more than a pele-tower, but it must have been formidable of its kind. The surrounding fosse is 30 feet wide, and the outer rampart, strongly developed on east and west, rises 15 feet above the floor of the fosse.

Hopton Castle, near Clun, Shropshire, is a similar diminutive stronghold, a shell-keep only, with walls 10 feet thick, standing upon a depressed mound within

a circular fosse. The keep measures only 50 feet by 48 feet externally, and beyond the fosse are traces of one or two baileys, with no vestige of masonry.

Plans of one or two other early castles are here given. In the case of Bramber, Sussex (Fig. 139), a natural hill has been scarped and trenched to form an ample bailey,

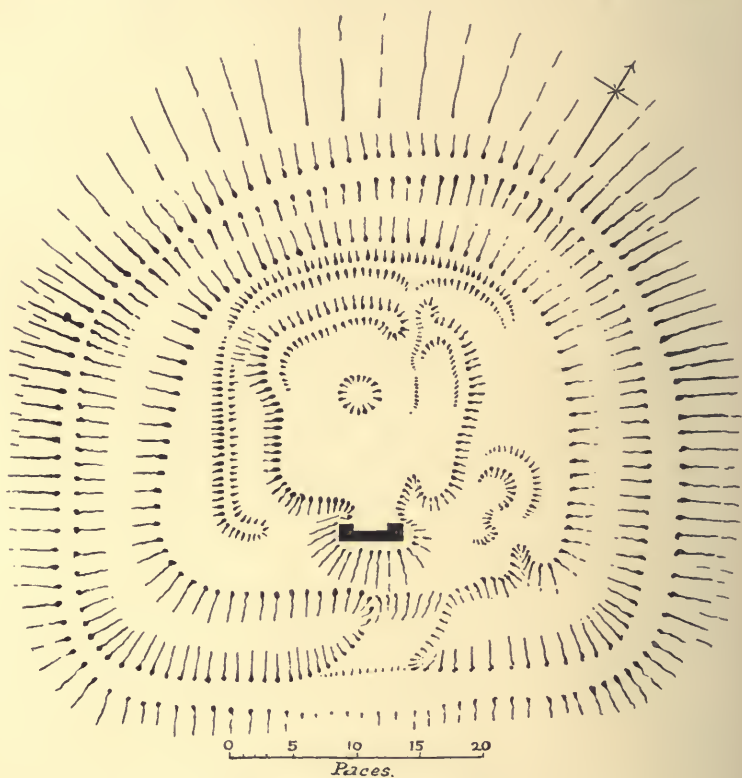


FIG. 138.—JOHN O' GAUNT'S CASTLE, HARROGATE.

560 feet by 280 feet, within which has been raised an artificial mound, 70 feet in diameter and 40 feet in height, without any encircling fosse. Here must have risen the shell-keep, but of this, as of other masonry, no fragment now remains. The place was already a "castle" in Domesday, then in the tenure of the great

house of de Braose, but in the days of Edward the Confessor its owner was the English Earl Guerd, so that the earthworks may in part be of pre-Conquest date. The position was one of immense strength, the scarp of the hill having a fall at an angle of 45° for over 180 feet, to a ditch 20 feet in width on the floor, with a counter-scarp of from 20 feet to 40 feet. What Bramber Castle

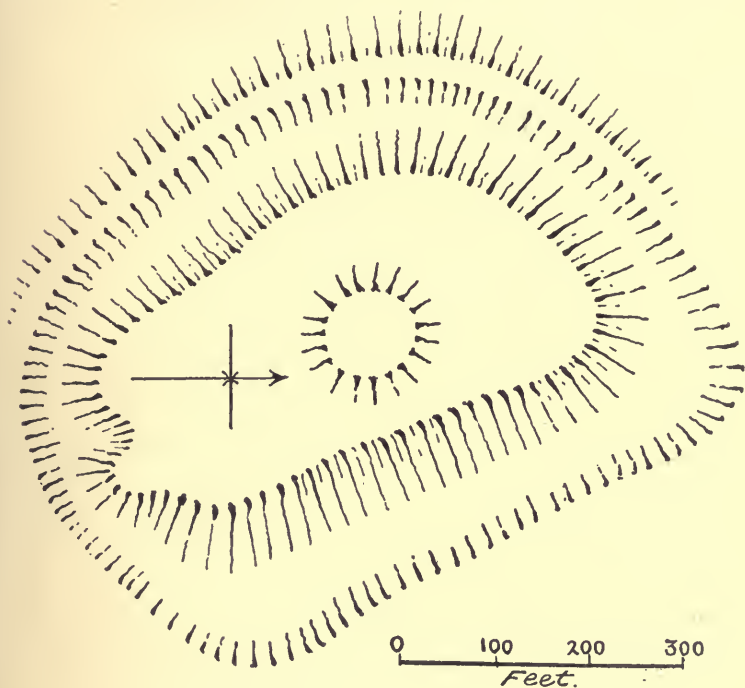


FIG. 139.—BRAMBER CASTLE.

may have been like is suggested by the much smaller border-castle of Skenfrith, Monmouthshire (Fig. 140), where the circular keep occupied much the same position, but the dry ditch with its immense retaining vallum is replaced by a wide wet moat, originally fed directly from the river Monnow.

Arundel Castle (Fig. 141) occupied a narrow, oblong platform, some 900 feet by 300 feet, cut off from the

adjacent high ground by a broad and deep fosse. The area is broken into two wards by a lofty conical mound of 230 feet diameter at the base, deeply fossed, and

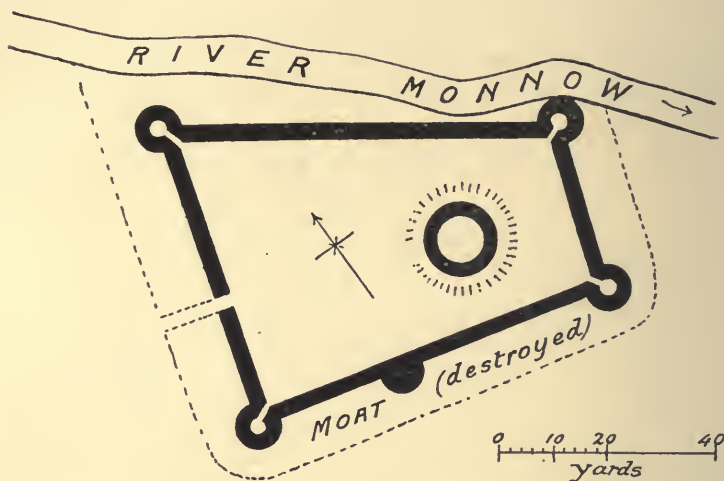


FIG. 140.—SKENFRITH CASTLE.

having a level summit 90 feet across. The mound is for the most part artificial, and its fosse, like the greater one surrounding the platform to the north and west,

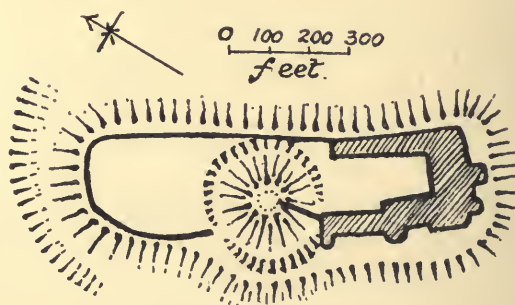


FIG. 141.—ARUNDEL CASTLE.

was dry. It has been supposed that the platform represents the area of a peninsular camp of British date. The place was certainly a royal manor in the days of Alfred,

and is mentioned in Domesday as being already a *castrum* in the Confessor's time.

Lewes Castle is remarkable for the presence of two fully developed mounts,¹ placed east and west at a distance of about 120 yards, though there is no means of accounting for the fact. Little or nothing is known of any lord of Lewes in Saxon times, although the place was important enough in Aethelstan's day to possess the unusual privilege of two mints. The Conqueror gave it to William de Warenne, together with the hand of his daughter Gundrada. The *Fabian Chronicle* records that in the twenty-first year of King Alfred the Danes visited the town, and built "a tower or castel" near the river, which work was very promptly "bette doun to the grounde." This cannot have had any connexion with the castle mounts, and if it be not identical with the so-called Calvary-mount in Southover already mentioned, it must have been so well "bette doun" as to have entirely vanished. A fortress of still earlier date is said to have existed on the spot now occupied by the church and churchyard of St. John sub Castro, outside the castle's precincts to the north. But so far as can be ascertained, the castle and its earth-works were the work of Norman builders only, and the oddity of the double mount remains unexplained.

In all of these cases the position selected was one

¹ At Lincoln also there are two mounts, but one is only half as large as the other, and neither approaches the dimensions of the mounts at Lewes. At the castle of Vieux Conches, in Normandy, there are likewise two. This, a nearly circular enclosure, with no remaining traces of masonry, is known to have been built in the eleventh century and abandoned as early as 1040. Lincoln Castle occupies a corner of the older Roman station. The case of York, with its two mounts of Clifford's Tower and The Bail, is no parallel, for those represent independent fortresses on opposite sides of the river. At Ripon again there were two mounts, of which one (Ailey Hill, above, p. 423) still remains, but the other has been wholly removed. It may be doubted whether the latter was not a natural formation, such as occurs frequently in the gravelly soil of the district.

of very great natural strength, and the prominent feature of the earthworks is the mound, which is always artificial. There are other instances illustrating the way in which the traditional mound of the earlier type of fortress gradually shrank in size and importance, until in some cases it appears to have become little more than a pretence. Such a case is Eaton Socon (Fig. 142), Bedfordshire, which is otherwise a formidable specimen of

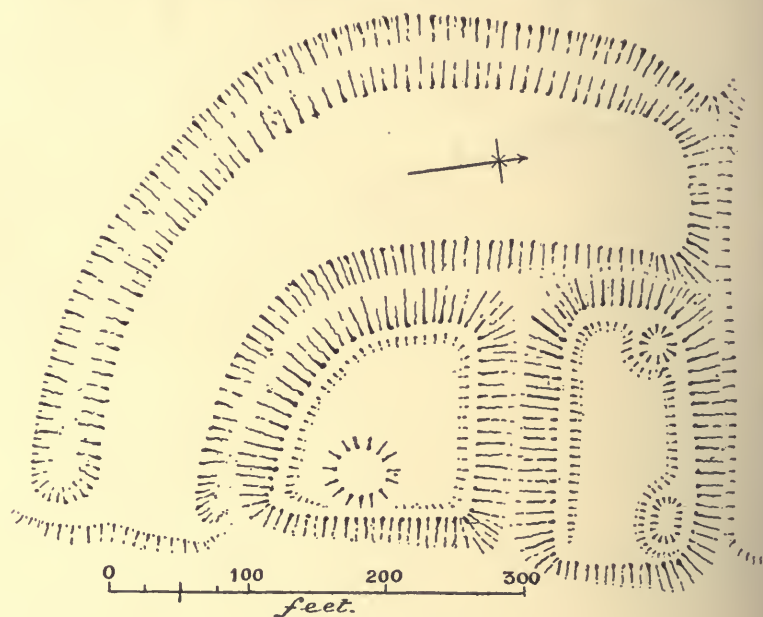


FIG. 142.—EATON SOCON.

earthwork, traditionally constructed by the Beauchamps, and showing a characteristic arrangement of the baileys. An example of a very early castle which shows no trace of any mound is at Whitchurch, Bucks (Fig. 143), the work of Hugh de Bolbec,¹ from which the last stone

¹ Hugh de Bolbec, a descendant of the Conqueror's great-grandmother, held the manor under Walter Giffard, *temp.* Domesday. His descendant, another Hugh, is the reputed builder of the stone castle, *circa* 1164 (Lipscombe's *Hist. Bucks.*)

has long since vanished. The peculiar terracing of the natural soil upon which it stood finds analogies in Bramber (part natural, part artificial) and Laxton, Notts (wholly artificial).

Carlisle again, possibly a Norman adaptation of a British promontory fortress, has no trace of any mound. Neither

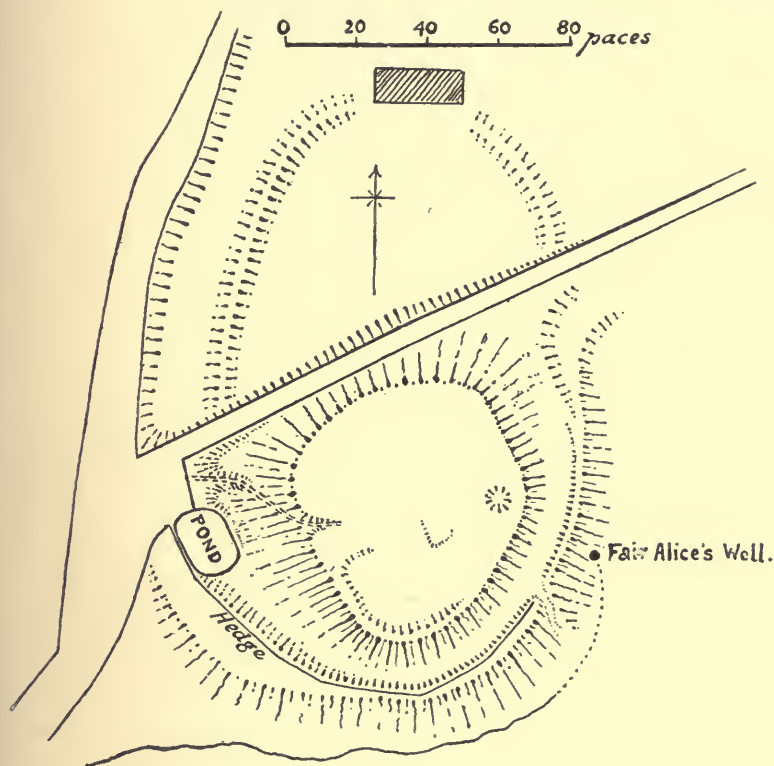


FIG. 143.—WHITCHURCH, BUCKS.

has Helmsley Castle, a fortress whose rectangular plan and large scale have led to the belief that it may be an adaptation of a Roman site. No such inference is necessary: William the Conqueror, as has been said, set a fashion for square and rectangular castles. Helmsley appears to belong to the twelfth century.

The Norman Kings came very early to restrict with jealousy the multiplication of castles, realizing that each new fortress was a new centre of possible rebellion. In the disturbed days of King Stephen the barons took to building castles without license, and the country was covered with such "adulterine" fortresses, the destruction of which kept Henry II. busily employed during a long reign. As the Crown again grew stronger and the Baronage grew weaker, the license was once more rigorously restricted, and the greater and lesser lords, gradually ceasing to live exclusively for violence and private war, came to pay less attention to military requirements, more to their personal comfort. The fashion of building fortresses died out, and there came in castles of the fully developed type, spacious and many storied buildings sufficiently roomy to accommodate the lord's household with all that was needful for the comfort and security of his person and the good of his soul.

The central part was the keep, surrounded by fosse and curtain wall. The keep itself was commonly of rectangular plan enclosing a courtyard, and as the lines of the outer enceinte corresponded more or less exactly to those of the inner works, the whole was in a loose sense "concentric." In the most fully developed examples there are two encintes, and the concentric arrangement is then very noticeable. As castles of this type were first erected in large numbers by Edward I., the terms "Edwardian" and "concentric" are interchangeable. There are typical examples at Beaumaris (Fig. 144) and Harlech (Fig. 145); others at Caernarvon and Caerphilly. A similar plan resulted at Middleham, Yorks, from the building by the Nevilles of a second square fortress about the original Norman Castle of Fitz-Ranulf; and much the same plan was that of Kilwardby Castle, the work of Sir Brian Fitz-Allan, *temp.* Edward I. Where the outer enceinte was dispensed with, for reasons of economy or otherwise, the

inner building remained merely as a more or less rectangular block, sufficiently defended by a wide and deep

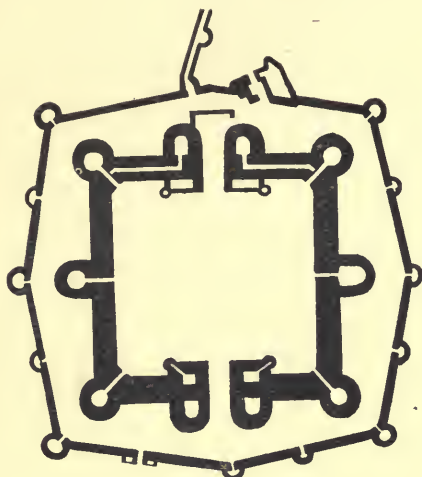


FIG. 144.—BEAUMARIS CASTLE.

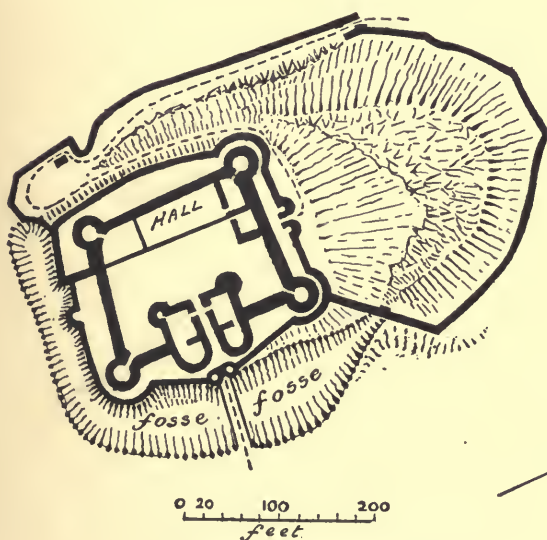


FIG. 145.—HARLECH CASTLE.

moat. In the larger examples the central space remained an open court, as at Bodiam, Sussex, where the moat

reached the extraordinary width of 60 yards.¹ Snape Castle is another instance. In less ambitious buildings the central court might disappear, and the result was a simple house with nothing of the castle about it save its solid fabric, and in many cases the towers at the four corners. Even these were retained more for convenience than for defence, the stairways to the upper floor or floors being set in one or other of the towers. There is a

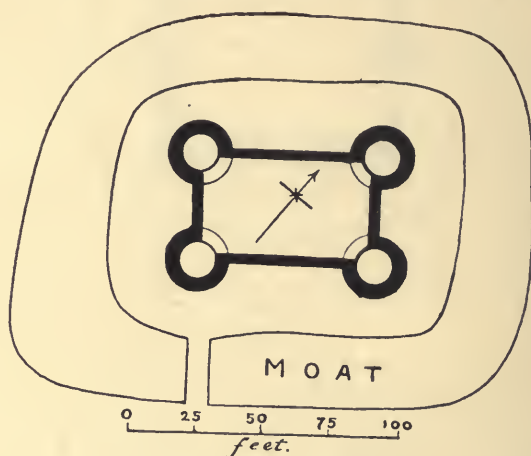


FIG. 146.—NUNNEY CASTLE.

well preserved example in Nunney Castle,² Somersetshire (Fig. 146).

Where every vestige of masonry has long since vanished the earthworks of these castles—the great moats and mounds—still remain, sometimes of amazing size. England

¹ The moat, however, as is often the case with very large examples, is only partially due to excavation. It was mostly formed simply by banking up the eastern side, and so enclosing a natural hollow in the slope of the ground. The necessary water is obtained from the river Rother. The entire work—moat and castle—is said to belong to the fourteenth century.

² Cited in Turner's *Domestic Architecture* as a good instance of the "tower-built houses," which in troubled districts are represented by the pele-towers, or by such works as Dacre Castle, Cumberland, and Langley Castle, Northumberland.

has perhaps nothing to show so impressive as the earthworks of the Norman Castle of Arques (Fig. 147), 5 miles

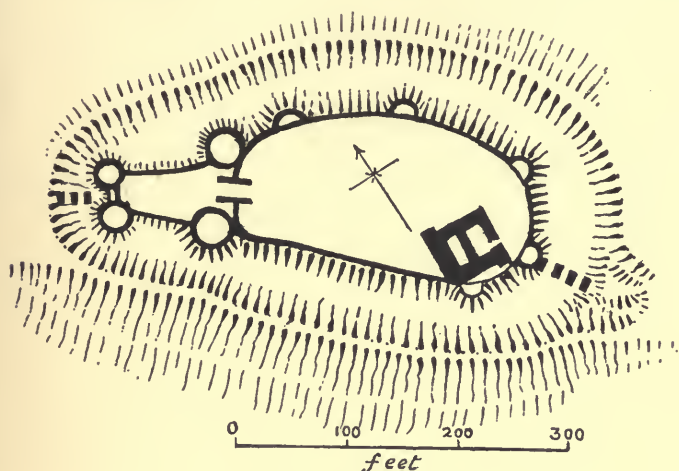


FIG. 147.—ARQUES.

from Dieppe, which belong to the eleventh century. The huge encircling ditch, 60 feet in depth and 70 feet in width, surrounds an area of 5 acres. But there are tremendous earthworks at Castle Acre, Castle Rising, and a score of

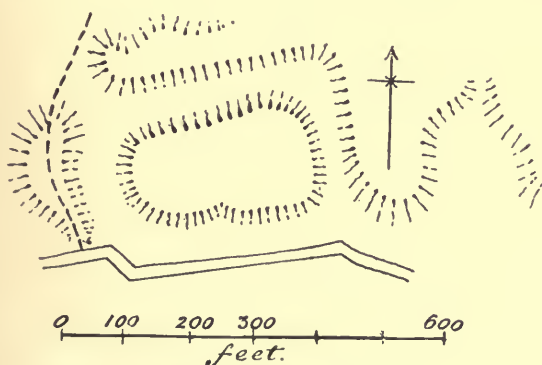


FIG. 148.—BURWELL CASTLE.

other places. Scaleby Castle, Cumberland, was furnished with two circular moats, the outer one being very nearly a mile round. At Burwell, Cambridgeshire (Fig. 148), is

an enormous fosse, marking the site of a castle said to have been built by King Stephen. It stood a siege in 1144, in which Geoffrey de Mandeville lost his life. The much less ambitious work known as The Roundabout, or Desborough Castle (Fig. 149), a mile west of High Wycombe, is nevertheless formidable. In area about an acre, it is surrounded on three sides by a vallum which, on the southern and strongest side, has an inner slope of 35 feet,

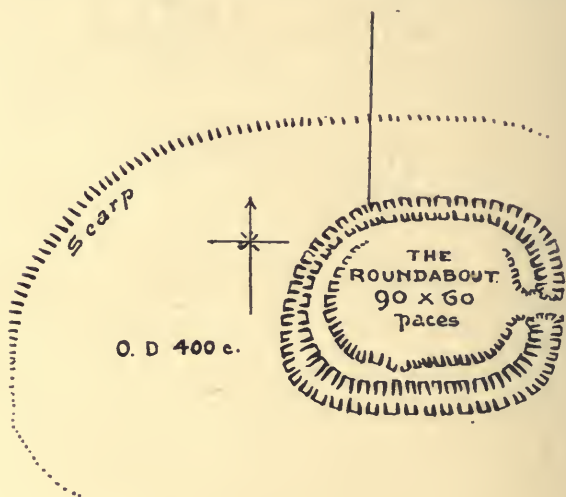


FIG. 149.—DESBOROUGH.

an outer slope to the bottom of the fosse of 43 feet, while from lip to lip the fosse here measures 56 feet.¹ There

¹ This work is of interest as an undoubted example of the adaptation of an older British (?) fortress by a later people. Of the British work there remains now only a pronounced scarp rounding the north-western brow of the hill, and still traceable along the northern side of the Roundabout. Proof that it once ran round the southern side also is only to be seen when the ground there happens to bear the right kind of crop—standing corn, whose straight drilled lines reveal the otherwise imperceptible dip in the soil where ran the fosse. The original camp was probably very much like its near neighbour on Keep Hill, one mile east of Wycombe, where again the northern portion of the enceinte, lying upon cultivable land on the actual top of the hill, has entirely vanished. That the Roundabout is of different date from this scarp is suggested by its eccentric position. The spot was of sufficient

was at one time some sort of building on the site, but its every vestige has long since disappeared. It is recorded that in 1743 an "ecclesiastical" window-frame was dug up on the spot, which might suggest that the building was of the type of the thirteenth or fourteenth century. Even the name of Desborough, attaching to the site, has no explanation. An older name for the locality was Old Hollows.

There occur here and there perfectly circular moats, wet or dry, and of great strength, which may have been the exterior defences of small castles analogous to pele-towers. In a case like that of Peel Hall Moat, between Ashton and Mouldsworth in Cheshire, there can be little doubt that there once stood here a pele-tower for the protection of the Welsh Marches, the more so as the island, 80 feet across and considerably raised above the natural level, bears a strong likeness to a somewhat truncated mount of the normal kind. The moat here has a width of about 60 feet. But in other instances there is little or no evidence for the raising of the platform, so that it is not easy in extreme cases to guess what can have been done with the mass of material removed from the fosse. Brogyntyn Castle, near Oswestry, is a perfectly round moated site, the external diameter 290 feet, the internal 160 feet, and the fosse having a width of 65 feet. In yet a third case, $1\frac{1}{2}$ mile east of Llandovery, the circular area measures 198 feet in diameter and the fosse is proportionately large. There is said once to have been some sort of external vallum here. The spot is known as Ynys-y-borde, "Table Island," or Bord-gron, "Round Table."

importance in early Saxon times to give its name to one of the Hundreds of Bucks, and an old roadway, known as Gallows Lane, leading up to the hill, preserves the memory of a time when Desborough Castle was the scene of the administration of justice, possibly therefore a moot. That the scarp belongs to a far older period is probable, not merely from its resemblance to the works on Keep Hill, but also because the site is littered with worked flints and other neolithic *vestigia*.

With these may be compared an oval enclosure at Llanfair Isgair, known as Gerlan-ddibont, "the place without a bridge," where, however, the area, 190 by 150 feet, is surrounded by a vallum of earth 20 feet thick and upwards of 8 feet high; and the well-known work of Tomen y Mur, $1\frac{1}{2}$ mile from the railway-station of Maentwrog Road, where the area, likewise oval, has a similar containing wall, and the presence of a large mound at once suggests the hand of Norman builders. The enclosure itself, however, is believed to represent a Roman station.

At Middleham (Fig. 150), Yorks, are to be seen side by side Norman castles of the earlier and of the later type. The mount-and-bailey fortress is in fine preservation, saving the outer bailey, which appears merely as a long strip of land following the ridge, with defences which can apparently never have been of great strength. The inner bailey and the mount are very fine specimens of their kind, the scarp of the latter rising to 60 feet and extremely steep, the fosses deep and wide. The parapet of the mount is of exceptional height and strength, curiously broadened out at the north-west angle, and its plan is approximately rectangular rather than round. Four hundred yards away to the north-east rise the ruins of a stone-built castle of two periods. The inner and older part of the building, Norman in style, is to all intents a simple square of masonry, without mound or other visible trace of earthworks. About this was built by the Nevilles (fourteenth century) a second square in the decorated style of the period. The moat which originally surrounded the whole has now entirely disappeared. Records declare that in the days of the Confessor "Midlai" was held by Ghilepatric, a Dane, and was granted by the Conqueror to Fitz-Ranulf, part of whose service was the rendering of a Danish axe. It was Robert Fitz-Ranulf began the older stone castle in 1190. Until that date therefore the Norman lords of

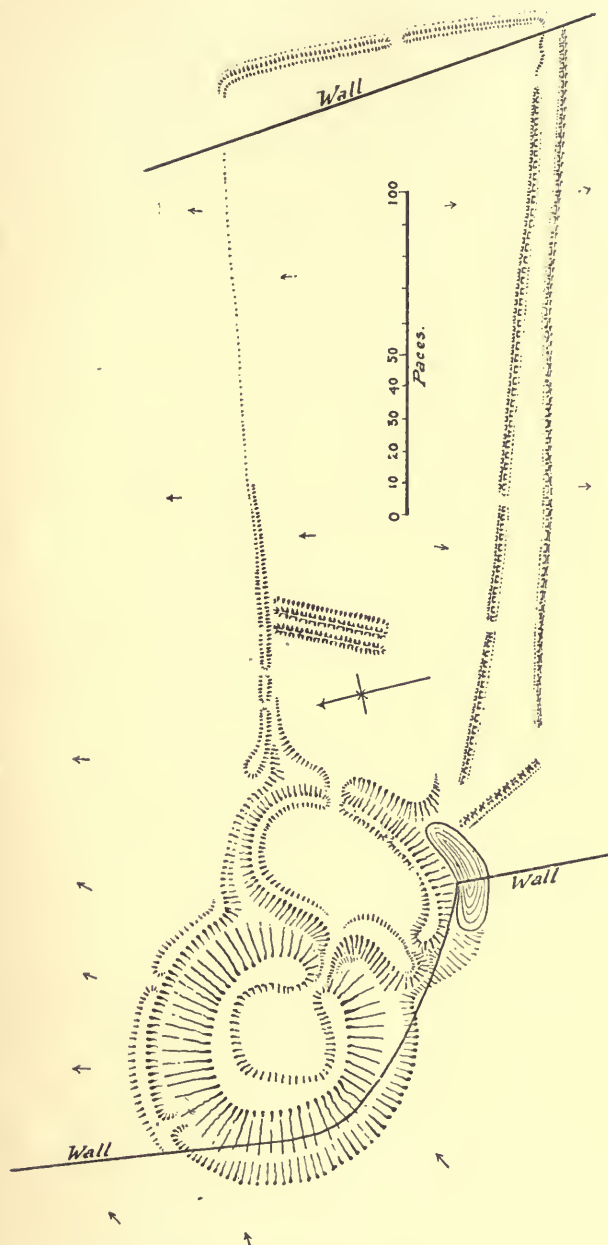


FIG. 150.—WILLIAM'S HILL, MIDDLEHAM

Middleham were content to occupy the mount-and-bailey fortress constructed by the first grantee. Of the residence of Ghilepatric there is no record.

The extensive group of works at Topcliffe (Fig. 151), near Thirsk, must likewise be of different dates. Here a long tongue of land, covered on two sides by the waters of the Swale and the Cod Beck, is cut off from the adjoining high ground by a dyke half a mile in length, with fosse

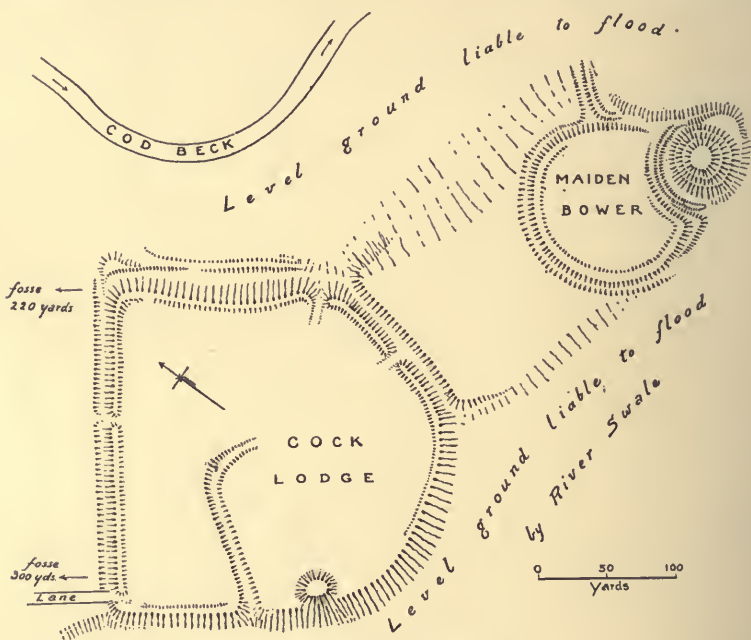


FIG. 151.—TOPCLIFFE.

to the north, running from one stream to the other. Behind this dyke lies a large "camp," formed by cutting fosses across the high ground. These fosses are as much as 45 feet across and proportionately deep. To east and west it was only needful to scarp the position, the fall of the ground being from 30 to 60 feet along the slope. Around three sides of the area thus marked out runs a heavy vallum. On the extreme edge of the area on the

western side stands a small mound some 65 paces about and perhaps 18 feet in height, with no visible trace of any ditch; and a second fosse partially divides this (the highest) portion of the area from the rest. On the very tail of the ridge, some 300 yards further away to the south, lies a mount of great size, covered by a circular bailey of the usual type, with some traces of the vallum and fosse of a second bailey lying to the east and extending as far as the Cod Beck. The great central "camp" has no obvious relation to the last-named work, there being no trace of any works connecting the two, and the two mounts are of different types. But whatever the date to which it originally belonged, the larger "camp" was, from the Conquest onwards for at least six centuries, the site of the principal castle of the redoubtable Percies of Northumberland. Every stone of the building has vanished, and local tradition retains but a vague and undignified memory of some building called "Cock Lodge" which once stood here: but as late as 1602 it was of dignity sufficient to entertain royalty in the person of James I., and in 1646 it was for a time the headquarters of the invading Scots.¹

The subjoined plan of an earthwork (Fig. 152) in a spot known as Magdalen Field, near West Tanfield, Yorks, illustrates the difficulty of determining the date of such things by the mere test of form. It occupies a precipitous promontory (375 feet O.D.) overlooking the river Ure, and its analogy to the regular promontory fortress is heightened by the transverse fosse and vallum covering the approach from the east. The principal portion of the earthworks shows an approximately rectangular plan, with inner vallum and outer fosse, strongly suggestive of a Roman camp. From its position and plan it is clear

¹ In Edward the Confessor's time, Topcliffe was held by one Bernulf. William I. gave it to William de Percy. In local parlance the mount-and-bailey fortress is known as Maiden Bower.

that the ditch can never have held water, nor is it of the width usual with wet ditches. Nevertheless there is no question that this is a mediæval work: the covering works to the east have their parallel on other sites known to be Norman, and the rectangular enclosure, while it has

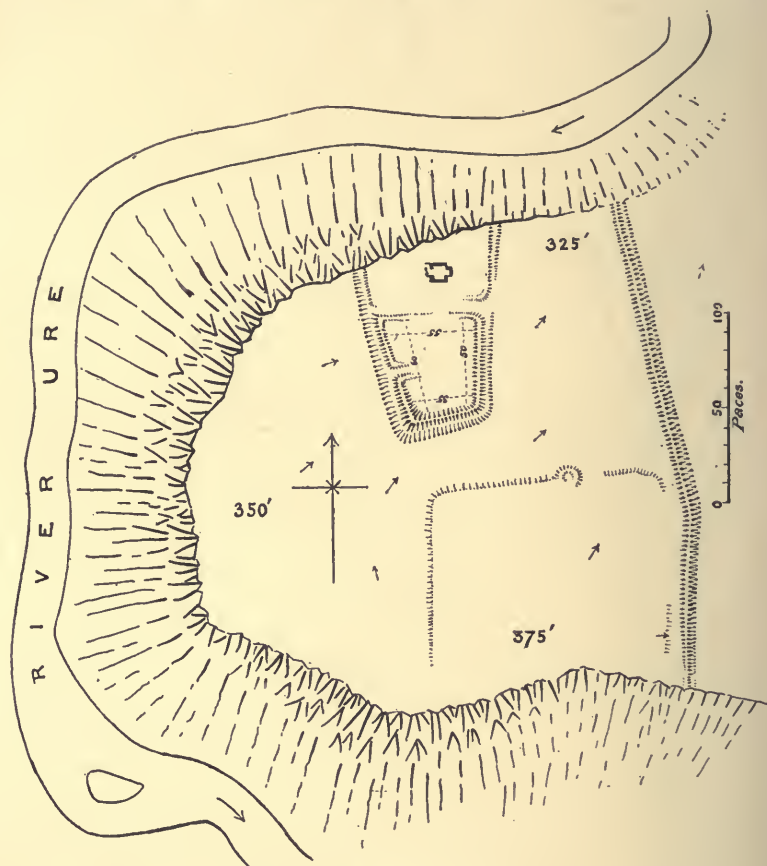


FIG. 152.—MAGDALEN FIELD.

in reality no feature which is peculiarly Roman, has several which are non-Roman. In all likelihood it represents a residence of the de Marmions, who obtained in the early part of the fourteenth century license to crenellate their residence in the Forest of Tanfield, known

as The Hermitage.¹ It was seemingly speedily abandoned for a more convenient site in Tanfield village, where the fine gate-tower, the only surviving relic of their later castle, is a beautiful specimen of its kind. Just without the northern wall of the older site are the ruined foundation-walls of an old chapel—whence probably the names of the “Hermitage” and “Magdalen Field”—and in certain lights one can see to the south-east the ground-plan of more extensive walls, with the remains of the foundations of a round tower. These latter presumably date from the license to crenellate, while the small rectangular enclosure, only some 60 paces long and 40 wide, with its weak defences, probably represents the humbler mansion with which the de Marmions had heretofore been content.

As the conditions of life became ever more settled, and the power of the baronage continually less unfettered, the military character of the mason-work rapidly altered, and the buildings became, as Clark remarks, less castle-palaces than palace-castles. When the use of brick became general again, in the first half of the fifteenth century, the victory of the domestic over the military architect may be said to have been complete. Defensible, of course, the castles thereafter built still were, if occasion should require it, but this was no longer the first consideration. The great nobles continued to maintain their bands, larger or smaller, of armed retainers until they ruined themselves in the Wars of the Roses. The results of those wars were soon manifested. Henry VII. was the first sovereign strong enough to order and enforce the disbanding of these private armies. When this was accomplished there was no further reason for building fortresses of the traditional kind at all, and the dwellings of even the greatest nobles were henceforth designed almost exclusively for the com-

¹ This identification was first suggested by Mr. Lukis. The license to crenellate is dated 8 Ed. II.

fort of themselves, their families, and their households. If seemingly formidable gateways, towers, turrets, and machicolations were still affected, these were now little more than pretences—ornamental survivals of the older mode. At the same time the disbanding of the armed retainers removed the menace of private war, which had been the chief reason for digging costly moats. Probably few moats were dug, at least for purely defensive purposes, after 1500 A.D.

The changed character of the castles of the sixteenth century is well seen in the ruins of Snape Castle, near Bedale, Yorks, which, originally a stronghold of the Nevilles of Middleham, passed by marriage to the Cecils of Elizabethan fame. The ruins are those of a square palace-castle, with square towers at the angles, and no trace of moat or other outworks; while the wall, no longer the blind wall of a mere fortress, is decorated with elaborately carved pilasters, in the style of the Renaissance.

Certain subsidiary forms of earthwork might tend to blur the outlines of the original castle-plan. The Normans were great well-sinkers; indeed, the modern artesian-well takes its name from the fact that such wells were first employed—in Western Europe—at Artois in Picardy. The castle, of course, had its fish-ponds, of which more anon, and other similar “offices.” It had also, sometimes, an elaborate provision of secret passages to secure the entry of provisions, or the sortie of the garrison, under siege. There was such a passage constructed in the Norman castle of Old Sarum. It had also its proper system of drainage, and some of the sewers of old castles have doubtless been passed off upon modern sight-seers as subterranean passages of another purpose. The series of enormous galleries lately opened up beneath the famous Castle of Loches, near Tours, was doubtless constructed originally for sanitary purposes only. And finally, the

superficial plan of any ruined Norman site is very likely to be perplexed and disguised by the earthworks erected during one or other of the many sieges which it underwent—sieges for the most part, perhaps, unrecorded. For the Normans, in their siege-operations, followed in the main the methods of the Romans, approaching the enemy's walls by fosse and trench and mine; sweeping it by the fire of siege-towers like that famous *Matte Griffin* which Richard Cœur de Lion built for use at Acre and hanelled at Messina; or "sniping" from the safe vantage of an earthen mound, itself an imitation of the Roman *agger*, not inappropriately dubbed a *malvoisin*. One thing with another, it is no marvel if the earthen mounds and fosses that still remain reveal no uniform and obvious design.

It will be inferred from the foregoing remarks and examples that there is no great uniformity of plan, or of detail, in English castle-building. Castles of stone or of brick, like earthworks pure and simple, were of endless variety, and in consequence the mounds and trenches, platforms and fosses, which alone mark the present-day sites of scores of vanished fortresses, are infinitely various. Overgrown by brambles, or defaced by later vandalism, they may be as difficult to date as the remains of fortresses of far greater age, the more so as not seldom the same spot, occupied in succession by Briton and Roman, Saxon and Dane and Norman, may owe something of its features to each of those various peoples. Once again the warning holds good—earthworks are very deceptive. And although in many instances there is documentary evidence enough to establish the occupancy of a site by Norman, Dane, or Saxon, it is remarkable that about so many castles, some of them obviously of the first importance as military works, the records are absolutely silent. As for tradition, it is commonly as unreliable in respect of castles as of other antiquities, and nomenclature is no safer guide. The Saxon name

of burh was not apparently applied in Saxon times distinctively to any moated mount, and although in some cases the local speech of to-day knows such a work as "The Bury" or "The Burgh," more often those terms, or other dialect variations thereof (*e.g.*, The Berry, The Berries, The Burf, &c.), allude merely to the site of an early settlement not necessarily Saxon, and still less Norman;¹ while genuine remains of Norman and Saxon times have obtained some fancy name which has no relation to their origin. The term "Castle," itself of Norman introduction, is no guide at all, for even British camps in England are known locally as Buries or Castles indifferently, just as the equivalent forms in Gaelic (*Casteail*) and Welsh (*Castell*) are applied to fortresses of the most various dates.

The holder, Saxon or Norman, of many manors combined in one "honour," selected one of them as his headquarters or *caput*. Here he made his permanent residence, and around it naturally grew up a village, if none existed there before. Religion being the matter of most immediate importance next to personal security, a church or chapel stood conveniently near, and this explains why castle and church commonly stand side by side. It is scarcely needful to cite examples.

¹ In very many instances the term has reference to *Roman* sites. The usual phrase in the *Anglo-Saxon Chronicle* is that the builders "wrought a work." This is reflected in the syllable "wark," an element in many place-names, *e.g.* Carlswark, Southwark, Newark, Aldwark. But here again the reference is often to a Roman work; *e.g.* Aldwark, Nottinghamshire, represents the Roman *Margidunum*.

CHAPTER XIV

THE MOATED HOMESTEAD

*"The old knights with their mail were here,
The dames demure with high-built hair,
The grave ruffed sage, the cavalier
Flaunting his love-locks fair."*

THAT instinct which had led the Norman lords to rely greatly upon the moat for their security prompted the smaller folk to do likewise, and just as every castle had its moats and fosses, so every important town came to have its ditches, and every homestead of importance its moat. Not often does there now remain above the surface any trace of the ditches which, *e.g.* at Cambridge, surrounded and intersected the towns, although the operations of the builder and the navvy from time to time reveal the black earth, the broken pottery, and the other odds and ends which tell where ran the old water-courses and how convenient a refuse-pit the townsmen of the Middle Ages found them; but outside the towns, hidden away in green fields, hundreds of contemporary moats still shelter their shallowing waters, their rushes, their moor-hens, and whatever secrets their half-forgotten sites may keep.

How the rectangular moated castle was developed from the mount-and-bailey fortress has been suggested, and how the strictly military design of the earlier castle of stone

gave place to a purely domestic type of castle in stone or brick. Throughout this process of transition the one feature which remained unaltered was the moat. The motte was abandoned, barbican and bailey disappeared, but the moat remained. When the time came for others than lords spiritual and temporal to build dwellings for themselves, they followed, where it was possible, the example of their superiors and dug each his moat. For this no royal license was required, and wherever the physical features of the locality allowed it, there grew up the houses of Englishmen, every one a castle in miniature, showing, indeed, neither keep nor donjon nor curtain-walls, but a comfortable aggregation of dwelling-house, barns, and garden, safely packed away on and about an island, and approachable only by a single bridge. For though the amelioration of the conditions of life went steadily forward, the necessity of some sort of defence, or at any rate the fear that it might be necessary, lingered stubbornly; and even when this had altogether ceased, the obstinate individualism of the Englishman, quite as much as his obstinate conservatism, found therein an excuse for its indulgence.

The building of such moated houses at all, if it suggests that life outside the towns was still insecure, implies also that it was becoming safer. It implies also the growth of a class of persons whose interests lay in the soil, and whose means were sufficient to allow of their gratification—in other words, of an agricultural middle-class. And such a class grew up very slowly. Unknown in the purely feudal times immediately following the Conquest, its growth was viewed with jealousy by the noble class whose privileges it was destined in great measure to destroy. It had perhaps no existence before the thirteenth century, and was still small in the fourteenth century. Edward I., by his encouragement of industry and agriculture, gave to it its first real start in life, and in Chaucer's days the franklins

were a recognized, respected and envied company. The extension of wool-farming made them rich, and the revival of brick-building made it possible for them to construct better houses. The Wars of the Roses and the dissolution of the monasteries rid them of jealous rivals and threw into their hands more land, more wealth, and more power. From the close of the fifteenth to the beginning of the seventeenth century, they were perhaps at the zenith of their prosperity, but even in Elizabethan days their collective numbers, judged by modern standards, were ludicrously small. In Queen Elizabeth's time began that tremendous expansion of commerce and enterprise which was destined in the end to create a new plutocracy, in turn to invest their fortunes in the soil and so to become the "landed gentry."¹ But these came after the days of moats. The real moat-builders were the franklins, and these were fated to remain what they had always been, a yeoman class. They had made their money out of the land; they subsisted so long as the land could produce and maintain them. By the eighteenth century commerce had prevailed, and agriculture had already ceased to be the only highway to fortune.

At what date the earliest domestic moats were made it is impossible to say. That they were not known to the Britain of the Romans is tolerably certain, for the Roman preferred a dry situation and had a horror of *bestiolae*, i.e. microbes,² which his experience of Italy had taught him to abound upon marshy sites. Besides, the conditions of

¹ These remarks have reference only to the rural population, with whom the merchant-bankers of London and Bristol, and other towns, had little or nothing to do.

² This doctrine, correct enough for Italy, but not necessarily so in this more temperate climate, is enunciated by Varro (*De Re Rustica*). If you must build on low ground, he says, let your house look away from the marsh, for "in dry weather marshes breed imperceptible animalculæ, not to be seen by the eye, which penetrate into the human body through the nose and mouth, and cause many diseases." See an article by the Countess Martinengo Cesaresco, in *Contemporary Review*, December, 1899.

life, at least in those parts of the island where the villas are found, were not such as to require these elaborate defences. Some there may very well be which date back to Saxon times, for the Saxon loved the water as much as the Roman avoided it. Those moats, of comparatively rare occurrence, which show a circular plan, and sometimes also earthen ramparts about the island, have been thought to be amongst the oldest, and in some instances, perhaps, of Saxon date.¹ Mr. A. R. Goddard has noticed² certain moated sites in Bedfordshire, which appear to have been already there when Domesday was compiled.

¹ One of these is the "Round Moat" at Fowlmere (Foulmire), Cambs, 5 miles N.E. of Royston. It has an elliptical plan of remarkable symmetry, measuring about 300 feet by 200 feet; the bank surrounding the area ($1\frac{1}{2}$ acre) rises 7—12 feet in height, with a base of 35 feet; and the ditch, one half of which still holds water, is 20 feet wide, and was originally 11—12 feet deep. The work lies in the fen (O.D. 100 feet) on the Wardington Brook, a feeder of the Cam, upon a site which must always have been wet. Good authorities have pronounced it to be in all likelihood a British work, but some tentative digging (1908) has produced no confirmation of this view, nor indeed any other positive results. The tradition of the locality declares that a house once stood within it, which, if true, would not necessarily determine the date of the earthworks. See *Proc. Camb. Antiq. Soc.*, No. xlviii., p. 114.

² "Along the Wyboston Road, on both sides, for more than a mile, there is a continuous series of lesser moated sites. . . . Domesday notes the former presence of 12 Sokemen at Wiboldestune. This coincidence led to the special examination of other places where the settlements of Sokemen are recorded; as at Keysoe, where there were 12, and Harrowden (Herghetone), where there were 14. In both these places the same series of small slightly banked and moated enclosures occurs over a distance of about $\frac{3}{4}$ mile. If these Sokemen were of Scandinavian origin, it would be quite in keeping with their custom at home to surround their small 'tuns,' or farms, with banks of earth" (*Victoria Co. Hist. Bedfordshire*). Sokemen were to all intents freeholders. To the position of these sites analogy may be found in the sites of manors and villages right and left of the Great North Road, e.g. between Boroughbridge and Catterick. While there is rarely a house actually on the road, the villages lie in regular sequence on either hand, at an average distance of about a mile from the highway, so as to permit of the cultivation of the land all round the settlement. Mr. W. Stevenson makes much the same remark of the villages adjoining the Fosse Way in its course through Nottinghamshire (*Vict. Co. Hist. Notts*).

There are moated sites in East Anglia of very great antiquity. Local tradition carries back that of Helmingham Hall, 8 miles from Ipswich, for 800 years, and declares that its drawbridge has been raised nightly, as it is still raised, throughout those centuries. The famous Ighthammote House, Kent, boasts an antiquity almost as high.¹ In the thirteenth century domestic moats began to be numerous. There is one at Beckley, near Oxford, within which stood a residence occupied by the unlucky Richard, titular King of the Romans, who was taken prisoner in a windmill after the battle of Lewes, 1264. This, however, is perhaps rather to be classed amongst the palace-castles. In the next century the Black Prince had, it is said, another such residence at Prince's Risboro' (thence so called), but this appears to have had a very inferior moat.

From the thirteenth century onward probably everyone who, though unable to build himself a "castle" of whatever type, yet possessed property worth stealing, fell back upon the moat as a means of security, whenever it was practicable, and preferably of course upon the wet moat, because that was at once a cheaper and a more effective means of defence than a dry ditch; for the latter was useless unless it was of large proportions and further reinforced by very substantial valla or other constructions within. All householders, whether military, ecclesiastical, or otherwise, from the thirteenth century onward to the sixteenth, probably constructed moats of greater or less dignity in localities where the needful conditions were to be found.

So many are the moats and moated sites yet remaining, and so thickly are they scattered over the ground in

¹ The house is said to have a continuous history from the days of Henry II., although the oldest parts now remaining belong perhaps to the next (thirteenth) century. It may be added that the final syllable of the name Ighthammote probably represents the word *moot* rather than *moat*.

districts specially favourable for their making, that it is easy to gain an exaggerated idea of the numbers of the class that built them and of the population generally. To begin with, they are of course not all contemporaneous; and secondly, the moated houses included quite the humblest rank of homestead deserving of the name. In the towns, such as they were, resided the trading class, in houses quite as good, perhaps, but not separately moated. In the country there were no traders. At wide intervals rose the great fortified castles of barons and bishops; at shorter intervals were scattered monastic houses and granges; in every village was a church, and generally a church-house, and one or more manor-houses. By the fourteenth century many of the manor-houses had passed out of the hands of the lords of the manors, and there must have grown up a very thin sprinkling of other middle-class residences. Some of these buildings were of stone, but not by any means all. The great majority, perhaps, were of timber, or half-timbered at most. The churches and the church-houses excepted, most or all of them would be moated, and persons who were unable to go to the expense of making moats did not build houses in the open country. The mass of the rural population were peasants, living in the veriest hovels, of such rude construction that they have long since vanished. Those picturesque "cottages," of the fourteenth century and onwards, whose high gables and wide-breasted chimneys and irregular black and white timber-work so strongly appeal to the modern artist and photographer, were not cottages at all, but the residences of men very well-to-do as the times went, franklins and yeomen and lesser nobles. Seeing that the population of the whole of England in Queen Elizabeth's time is thought not to have exceeded some three millions, it is clear that this middle-class cannot have been very numerous even in the sixteenth century. In the fifteenth and fourteenth it must have been smaller still.

The men who built the ordinary domestic moats cannot for the most part have been wealthy, albeit they were well-to-do. A moat being a costly thing to make, there was an additional reason why the house within it should be usually of modest dimensions and of no expensive materials, especially as stone is usually scarce in the localities best suited for moats.¹ Conversely, brick-making was easy and cheap in such localities, so that with the revival of that art in the fifteenth century there came a great improvement in the fashion of building. If one invariably and instantly associates with the moat a house of red brick and red roof-tiles, it is because the earlier moated houses, built of wood for the most part, have long ago disappeared.²

The moat was most commonly rectangular, because this was the traditional plan of larger English homesteads, which were usually so arranged that the dwelling-house on one side, the various barns and byres on the remaining sides, surrounded a more or less square yard in which the stock might be secure at night. All windows looked upon this yard, all doors opened upon it, the outer side of the buildings being designed solely with the practical object

¹ Where stone was easily procurable it was not unusual to face the sides of the moat with masonry, but this would only be done by the more wealthy — by the builders of the palace-castles, rather than by the smaller yeomen. Markenfield Hall, Ripon, is a survival of this type of moat. The existing house dates mainly from the fourteenth century, the license to crenellate dating 1310.

² So far as the house itself was concerned, anything other than a wooden building was certainly the rare exception until the fourteenth century. Mud, "cob," "wattle-and-daub" were the usual materials, and the almost universal half-timber buildings of the later Middle Ages originally had their framework filled in, not with brick or stone, but with mud, cob, &c. The use of stone and brick for the outbuildings came later still, and has not yet altogether supplanted the older fashion. The earlier history of these gradual developments is traced in *The Evolution of the English House*, by S. O. Addy; from the fourteenth century onward it is dealt with in Turner's *Domestic Architecture*. In the former book will be found some facts illustrative of the extraordinary durability of cob-walls and similar work. The art of building them is all but extinct now, even in the remoter counties.

of presenting a blind wall to any would-be aggressor.¹ When a moat was thrown about such a homestead it became permissible to depart somewhat from this unat-

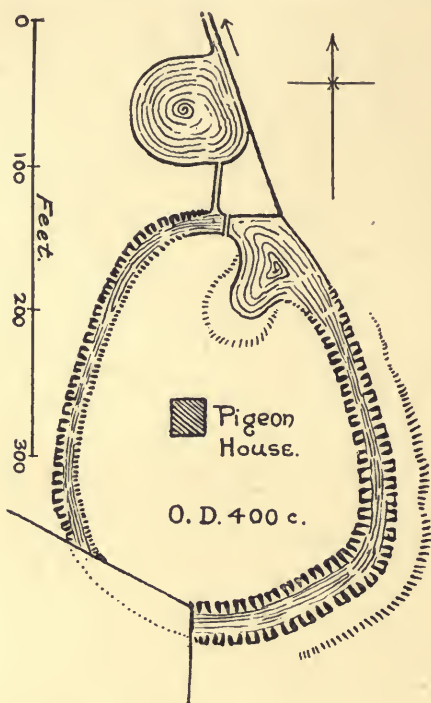


FIG. 153.—GROVE FARM, TERRICK'S CROSS.

tractive plan—to put doors and windows in the outer walls, and finally to turn the house, as it were, round and put the front outside, the back to the yard. But the four-square arrangement remained, and may be recognized to-day in scores of old farmsteads, moated or otherwise.

Moats of other forms occur, but they are the exceptions. Some few which present a strictly circular plan have been mentioned already.² There are others more or less

¹ Unmoated homesteads of this primitive type survive still in out-of-the-way parts of the country, in Devonshire, and in the northern counties. Some of these had formidable walls surrounding the entire homestead, *e.g.* Padley Hall, Derbyshire, where a wall of 5 feet in thickness, but without any moat, surrounded an area of upwards of 6 acres. The meaner folk in all parts of the country had neither moat nor wall, but at most a fence of sticks, like Chaucer's widow, whose cottage was

With stikkes."

"fenced all about

Even this kind of makeshift may still be seen in out-of-the-way places.

² Above, p. 443.

Oxon., measures nearly half a mile about, the single fosse being more than 40 feet from lip to lip, with a considerable vallum following the inner edge for the greater part of the circuit. The site is now dry. Others, again, have a plan which Mr. Chalkley Gould compared to the shape of a stirrup-iron, one side straight, the rest of the design curved in horse-shoe fashion. The moat at Little Pednor, Bucks (Fig. 154), is pentagonal, as is that at Bushmead, Beds (Fig. 170). In some cases it is clear that the eccentric form has arisen merely from the builders' taking advantage of the natural features of the ground, for where ever a convenient hollow offered itself they naturally made use of it. A moat at Michelham, Sussex, reputed the second largest in the country, is thought to represent what was originally a large standing pool or mere. The moated site at Givendale, near Ripon (Fig. 155), is a good example of adaptation: the builders merely raised and embanked the flat floor of a natural amphitheatre in the side of the rising ground overlooking the Ure, the moat upon the more assailable sides being as much as 60 paces over. It was fed from a spring on the slope, now almost dry, and the position of the abutments of the bridge is clearly marked at the northern angle. But in the great majority of instances the whole work is artificial, and where the builders had to do the whole work themselves they commonly chose a rectangular plan, and generally the simplest

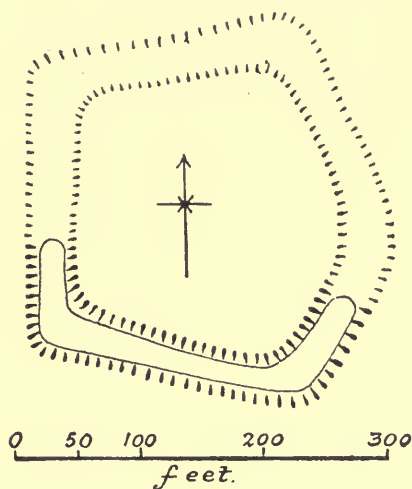


FIG. 154.—LITTLE PEDNOR.

—a more or less exact parallelogram. Nash Lee, Bucks (Fig. 156), is a good example of the simplest and smallest

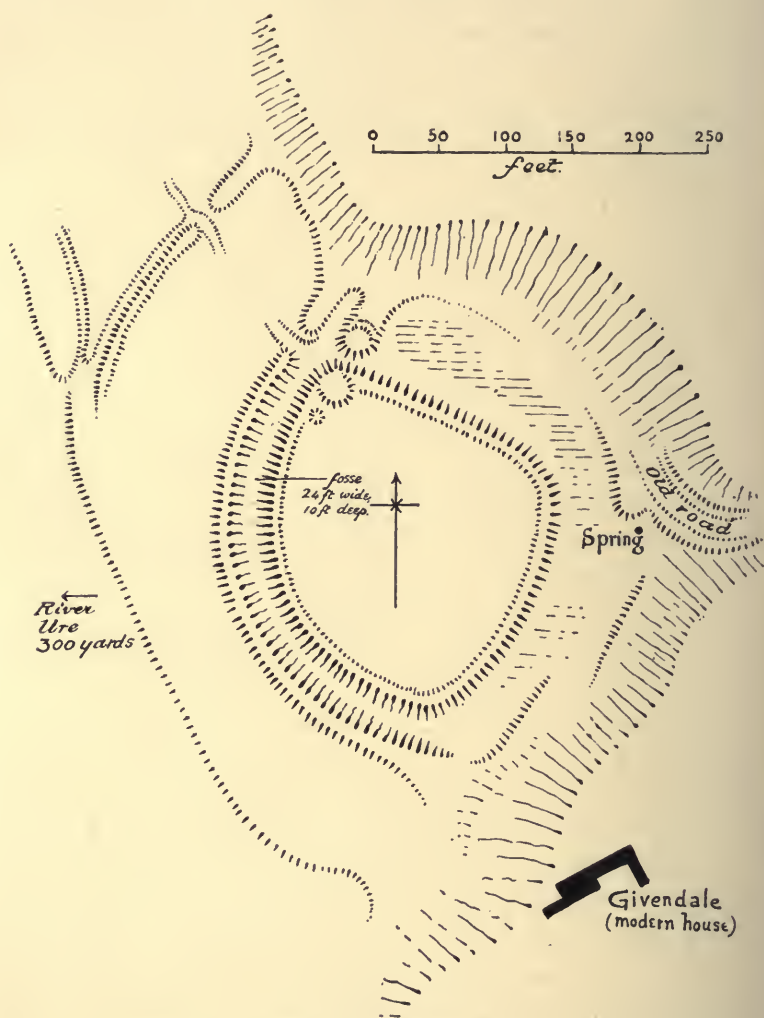


FIG. 155.—GIVENDALE.

type of moated site.¹ Sometimes there are two such

¹ This is a good illustration of the rapidity with which even moated sites may change. Less than fifty years ago it was a charming garden, with terraced walk running round the edge of the island, and deep water which

islands side by side, as at Apsley (Fig. 157), Bucks, where the moat along the south-eastern side, now partially filled in, was of great breadth, while the site is so low-lying, and the soil so peaty and wet, that all the year round the water is almost flush with the banks. At Great Kimble (Fig. 158) the second island is a mere narrow bank, too small to have furnished accommodation for any buildings of importance. Perhaps it was more for defence than

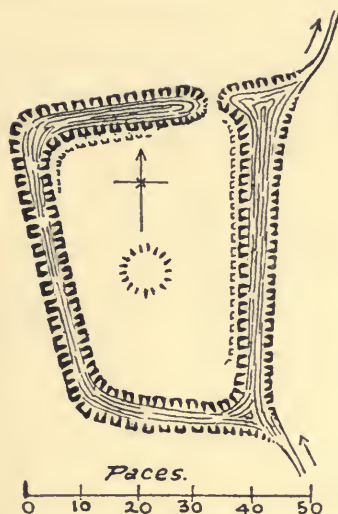


FIG. 156.—NASH LEE.

occupation, and the same may be the explanation of the similar but rather larger platform seen in the site at Stoke Mandeville (Fig. 159). This last site is remarkable for the small size of the central island, only 17 by 20 paces, and

reflected all the glory of old-fashioned flowers ; and its crowning pride was a great evergreen arbour so arranged that one could always find shelter from the wind, always catch whatever sun there was. The site of the arbour is now a mound, which will doubtless yet puzzle some antiquaries ; and the terrace-walk can still be traced ; but the flowers are gone, and most of the water too ; and of the house which stood just outside the entrance, not a brick remains. Some one tried to make use of the moat as a watercress bed, and some one else is trying to turn the island into an orchard.

the disproportionate width of the surrounding moat, which measures nearly 60 feet from lip to lip.¹ Sometimes the number of islands rises to three (Fig. 174), and sometimes one moat is surrounded by a second, generally of less width but of larger sweep; but the preference is always for rectangular rather than curvilinear figures. In some parts of the country the prevailing type is a small and perfectly square island, 30 to 40 yards

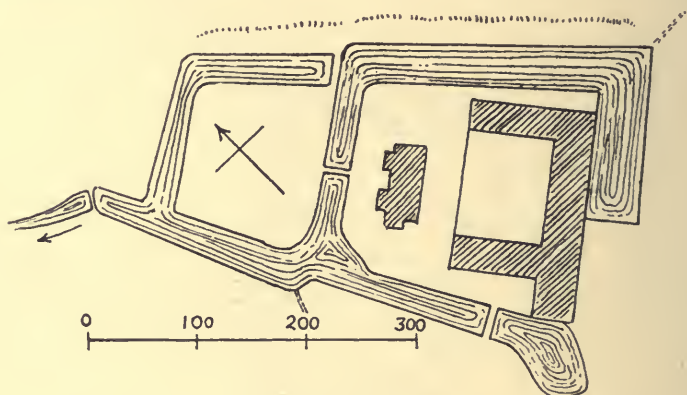


FIG. 157.—APSLEY.

across, with a deep moat, and no trace of any outer works. A plan is here given (Fig. 160) of a curious little work at North Lees, two miles north-west of Ripon. The island, which is considerably raised above the natural level (190 O.D.), measures no more than 32 paces in length, 16 paces at its widest and but 10 at

¹ It must be remembered that, until the sudden expansion of Elizabethan days, even manor-houses were commonly of the most modest proportions. A ground floor of two or three rooms only, an upper floor as simple, were considered ample accommodation for the family and its servants. See *Evolution of the English House*. Further, it was not essential that all the farm-buildings, &c., should be gathered within the "island." Many of them doubtless lay outside the moat. In the thirteenth and fourteenth centuries "when the King was coming, orders were sent ahead to run up the needful offices," which were, of course, of timber (Turner's *Domestic Architecture*).

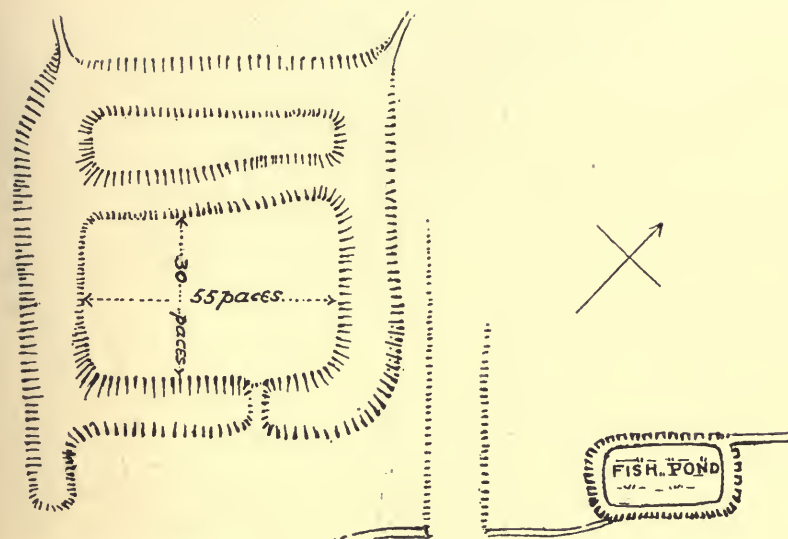


FIG. 158.—GREAT KIMBLE.

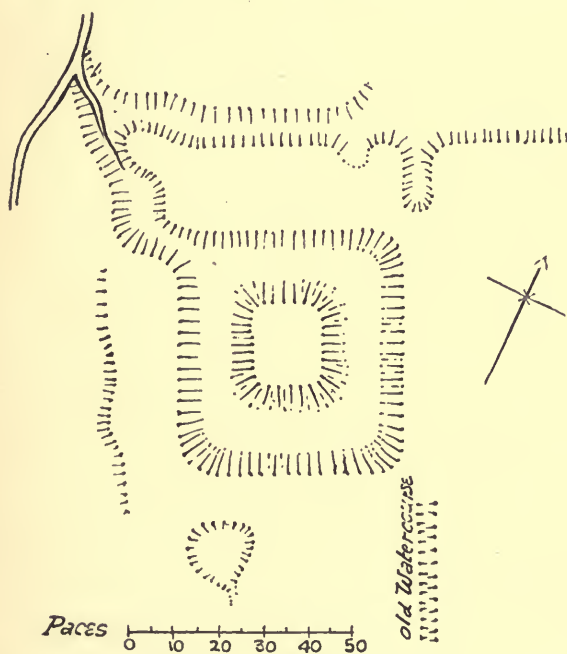


FIG. 159.—STOKE MANDEVILLE.

its narrowest, while the moat varies from 8 to 10 paces in width. The peculiar feature of the site is the *restigia* of what would seem to have been a large drum-tower, which occupies almost the entire width of the northern end of the island, and through which passed the approach. It is locally spoken of as a Roman work, but the traces of the usual feeders and water-courses show it to have been of the mediæval type. It stands within what was once the hunting-ground or chase of the Archbishops of York,

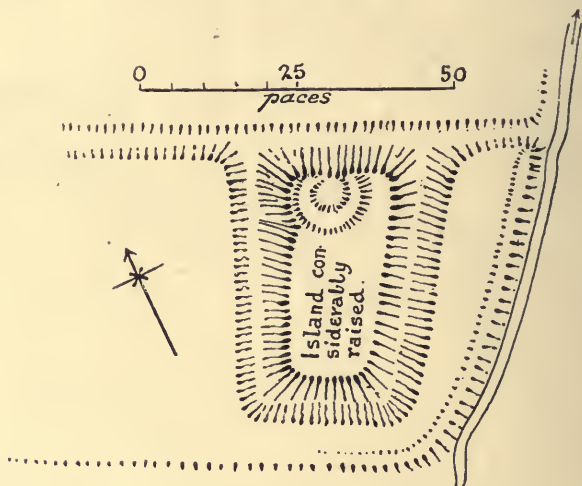


FIG. 160.—NORTH LEES, RIPON.

to which the name of the Deer-parks still attaches. Perhaps this diminutive moated site represents what was once a keeper's lodge, provided with some sort of tower as a look-out. At High Lodge, in Wychwood Forest, Oxfordshire, is another diminutive rectangular moated site, measuring only 100 by 120 feet over all, the moat being about 12 feet wide. It probably surrounded a watch-house of the keepers of the Forest, which it overlooks. There is a similar work—the "Roman Beacon"—at Mellor near Blackburn, perhaps likewise once a keeper's lodge of Inglewood.

The dimensions, depth, width, and area of the moat varied with the builder's means and ambitions, and with the nature of the ground, the supply of water, and other local considerations. There are some of which the contained area measures no more than 20 yards each way, while others include several acres. Perhaps a length of 80—100 yards, with a breadth of 50—80 yards, is an average size for the domestic moated site properly so called. It is a fairly formidable moat which measures no more than 30 feet from lip to lip, and there are some which have a width of as many yards. Of their depth it is not easy to speak accurately, for they are now choked with the accumulated soil and weed of centuries, if, indeed, they still hold water at all. For the genuine moat was rarely so constructed that it could be properly scoured. Its waters usually moved too slowly to cleanse it appreciably, and sluggish water quickly makes weeds, and these, again, make mud.¹ Such mud, however, so long as it is kept thoroughly wet, is a deep and slimy stuff more difficult to negotiate than even water itself; so the owner's only concern was to see that the weeds, mud, and rushes did not accumulate to such a height that the water no longer covered them. But here, as always, local peculiarities were the guiding factor. On a stiff clay a pond may go for years unscoured and be little the worse, but on a peaty soil the deepest ditch will fill up within a year or two through the crumbling of the sides and the "blowing up" of the bottom. The slope of the moat's side will vary, for the same reasons, from a perpendicular fall to the gentlest shelving descent. It is astonishing to see how steeply rise the banks of ancient moats in some localities where one would least expect it. As a general rule, moats upon very low and wet sites are formidable rather for their breadth

¹ The swans, which are so essential in any mental picture of a moat, were put there less for ornament than to keep down the weeds, and so check the steady process of silting up.

than their depth, and conversely upon higher levels the moat is rather deep than wide.

Perhaps 10 feet was a fair average depth for the original ditch when dug upon a level surface. If there is even a gentle slope of the ground, the moat will seem feeble upon the lower side and unduly deep on the other, where the

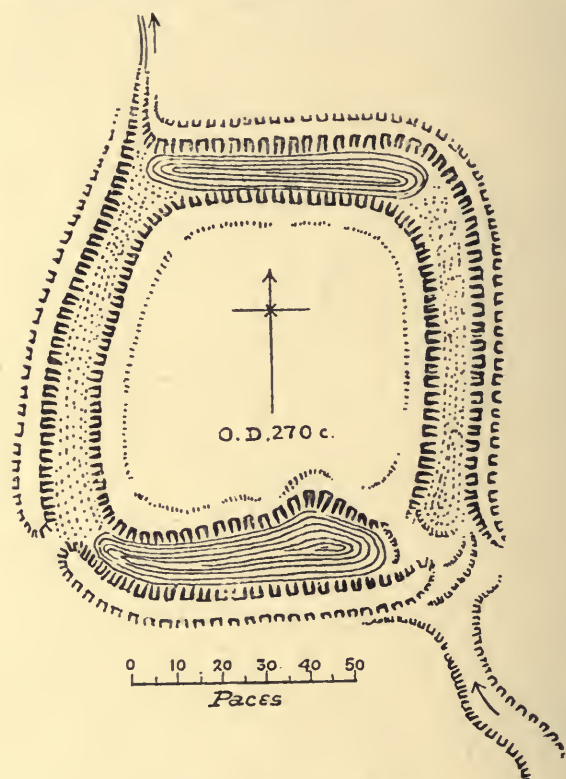


FIG. 161.—MOAT AT MARSH.

bank may be as much as 20 feet above the water level. On very flat and low-lying soils it was frequently necessary to throw up an outer vallum on one or more sides of the moat to secure a greater depth of water, as at Marsh, Bucks (Fig. 161), and at Givendale (Fig. 155). In other cases the continued dredging of the moat, and

the throwing out of the excavated mud along its margin, has produced somewhat the same appearance.

The soil removed in the process of making the original moat was usually thrown up upon the island, thus raising it above the level of the surrounding ground.¹ The difference in elevation is often very noticeable, often imperceptible. Sometimes, where the moated area is unusually small, the raising of the floor by the soil from the moat gives to the whole very much the appearance of a Norman castle-mount, the more or less rectangular plan alone betraying the difference. This raising of the island was, in low-lying districts, a matter of health. In the nature of things, a moated house must be upon a site where water is very near the surface,² and the year-long presence of water, often almost stagnant, on every hand must necessarily add to the dampness of the air and the soil. Every inch gained in elevation was thus of value. But according to the primitive methods of mediæval times, the moat was also the receptacle of all the sewage. If there was a steady flow of water, however slight, such pollution was of no moment; but if, as was very often the case, either from local conditions or from neglect of the proper precautions, the water was to all intents stagnant for long periods, there was an obvious reason for raising the house as far as possible above it. Modern faddism has gone so far that no person boasting himself practical would

¹ This feature at once distinguishes the moated site from the Roman camp, of which the floor was never thus purposely raised. A still easier distinction is furnished by the fosses; the Roman fosse was never intended to be wet, whereas the mediæval moat was rarely intended to be dry. If water stands in the fosse of a rectangular enclosure, the presumption is that such enclosure owes nothing to Rome. A good many deserted moats masquerade as "Roman camps" upon the Ordnance Map.

² It is quite likely that in such positions the building of a moat, at least in the later mediæval period, was often regarded as much in the light of a precaution against damp or flood as of a protection from violence. Many a "lonely moated grange" in fenny districts must have been waterlogged but for its fosse.

consent to live in a house lying close to water-level, moated about by a sluggish or stagnant pool, and unprovided with whatever may for the time being be considered the "most modern system of sanitation"; and anyone might be forgiven for assuming that the foundations of such a house must needs be damp, its atmosphere chilling and ague-provoking. But it is a remarkable fact that such houses are rarely damp, either without or within, so long as they are maintained in repair, and the fact that no other type of country-house was built or desired for so many centuries is surely proof that they were not insanitary. Undoubtedly the quality of the bricks, mortar and timber used by the old builder goes far to explain the fact. His bricks were made of the right kind of clay rightly fired, his mortar was mixed with real lime, he knew how to make his walls damp-proof,¹ and his timber was native oak thoroughly seasoned. The jerry-builder was not yet.

The first desideratum being an unfailing supply of water, the moat-builders naturally favoured the lower ground. The moated site, indeed, belongs to the lowlands, and to the foot-hills overlooking the lowlands, where, in the days before modern drainage and the modern practice of making reservoirs had combined to exhaust the springs below and to parch the soil above, water would stand for most of the year at but a few inches below the surface. The level stretches of the East Anglian counties are thickly strewn with moats, as are those of Kent, Bedfordshire, Hertfordshire, and Cambridgeshire. In Essex alone there are between 300 and 400, and even Sussex, its wide forest area notwithstanding,

¹ The cheapest, simplest, and best of all damp-proof courses is cemented, not with mortar, but with clay. The Romans knew the fact and acted upon it. So did the country builders of England until recent days. They have forgotten it now, and in consequence a modern house with no water in sight is often damper than an old one standing within a well-filled moat.

has more than 60. In the Fens, on the other hand, moats are few, for the simple reason that until the seventeenth century they were to all intents uninhabited, at any rate by persons in a position to choose their place of residence. Other areas, again, show few or no moats because they were dense forest, and still others because their sandy soil would neither provide the needful water nor retain it. All along the foot-hills of the Chilterns in Buckinghamshire and Oxfordshire are moats in numbers; they are almost all dry now, but their presence proves that there were at one time springs in plenty where now there are few or none. On higher levels one does not usually expect to find moats, but it is all a question of local conditions. They are to be found in smaller numbers right upon the top of the Chiltern Hills, wherever the clay surface-soil was deep enough to retain the water. The enormous moat at Grove Farm, Ashley Green, stands at a height of 500 feet; that at Little Pednor, near Chesham, at 580 feet; that at High Lodge, Oxfordshire, at 631 feet; and on the very summit of the isolated hill whereon stands the village of Brill, well over the 600-foot line, are the remains of an old moated site immediately north of the church, water still standing in one part of the ditch. But, speaking generally, the upper levels were left to builders of another class; the middle-class appropriately occupied the middle levels.

One or two examples are added of earthworks which evidently date from a time when the soil was much wetter than now. In Reddingwick Wood, $1\frac{1}{2}$ miles north-east of Great Missenden, is a deep and wide moat (Fig. 162) lying within other earthworks seemingly of entirely different date. The moat is still wet except in the driest summers, but the source from which it was filled is not now discoverable, nor any determinate traces of an effluent, while the presence of the surrounding works—a shallow fosse and rampart of a type usually associated

with British sites, and seemingly never designed to hold water—makes the presence of the wet moat the more anomalous. The entrance to the moated area towards the west is covered by a second fosse, much slighter in proportions, and so constructed as to leave the merest strip of soil between it and the main fosse.¹ On the

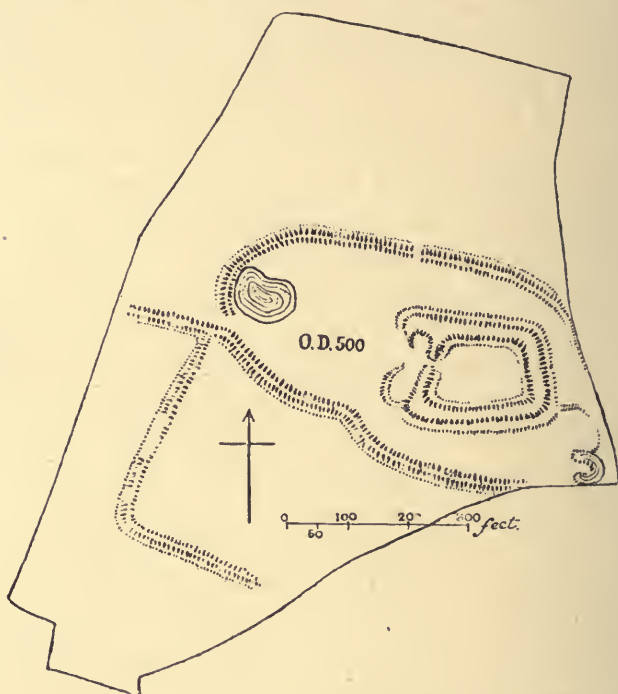


FIG. 162.—REDDINGWICK WOOD.

south side is an annexe, of which the straight rectangular lines have, of course, been taken as warranty for its Roman

¹ As this feature, not otherwise common in moated sites, is found again at Bray's Wood (see below), and in a somewhat more developed form at Great Kimble (Fig. 158) and Stoke Mandeville (Fig. 159), it would seem that it was a local peculiarity in defensive engineering. Doubtless there were such local peculiarities in the building of moats as there were in the building of churches. It occurs also at Markenfield Hall, Ripon, where, however, it is more obviously intended to strengthen the weakest side of the enclosure, and at Walkingham Hall, near Knaresborough (Fig. 167).

origin. Analogous in certain points is the group of works in Bray's Wood (Fig. 163), $1\frac{1}{2}$ miles to the north. Here an originally rectangular enclosure measuring 196×76 paces,¹ with fosse and vallum of very slight relief, contains a second enclosure of much smaller area but much greater strength. It is a square of 50 yards or rather

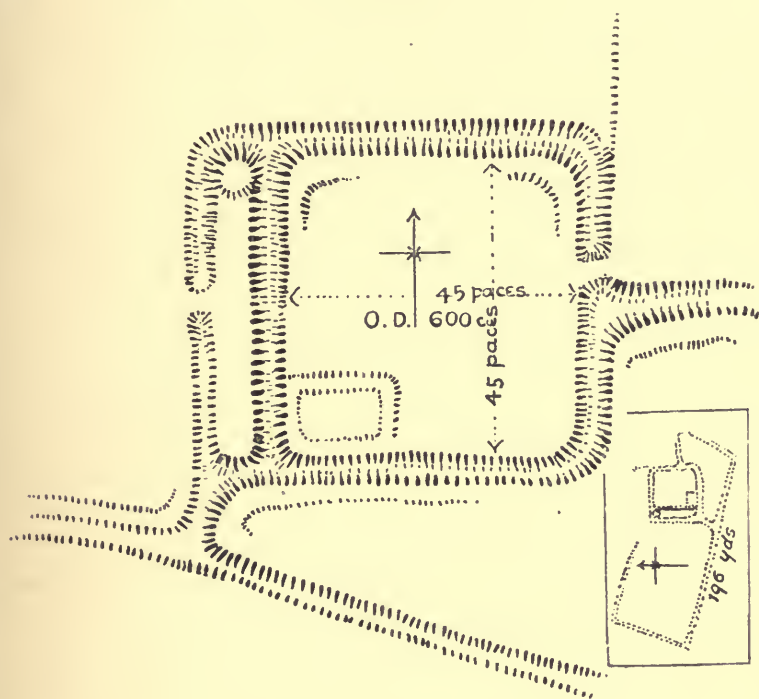


FIG. 163.—BRAY'S WOOD.

less, surrounded by a considerable ditch, with entrances east and west, and the western side, exactly as at Reddingwick, is covered by a second parallel fosse. In the south-west corner of this inner enclosure are the foundations of a rectangular building of flints apparently

¹ Most of the enceinte of this work is now entirely obliterated, if, indeed, it was ever completed.

laid without mortar.¹ On the eastern side was an annexe, of which the enclosing lines ran down to a pond now ploughed out. To all appearance the ditches communicated with this pond and with one another, so that they must be presumed to have been once wet. At the present time they are absolutely dry, and they do not show either the width or the depth, or the peculiar flat tread usual with wet moats. Pottery of "Roman" character is said to have been found on the spot, but it may be doubted whether it was not rather mediæval.

Earthworks of similar character—rectangular enclosures with ditches of slight width and depth, feeble valla, and mostly of very small extent—must in many instances be the remains of homesteads which, for whatever reason, had no wet moats. They are mostly to be found in spots overgrown with wood of recent planting, or in fields which have long been under grass, the plough having elsewhere completely destroyed them. They have a general resemblance to the works at Magdalen Field (Fig. 152), at Bossens (Fig. 100) and Rookwood (Fig. 104), and though usually styled Roman camps, are for the most part far too small to have been such.

In some few cases the moat is fed by springs which rise in its floor, as with the Bishop's Palace at Wells, or at some spot close at hand. More often the supply was drawn from a spring or stream at some little distance, and no little skill was shown in conducting the water to the required spot, providing against deficiency or flood, and regulating the flow to the owner's taste. Proficiency in making such leets was learned from the Normans, who were great builders of mills and mill-streams. Very

¹ Flint work of precisely the same character was found in 1858 on what was unquestionably a Roman site at King's Field, Terriek, Bucks. See *Records of Bucks*, vol. ii., p. 58. The works in Bray's Wood, investigated in 1855, are described in the same publication, vol. i., p. 170. They have suffered materially in the intervening half-century.

occasionally the natural stream was made to do duty as part of the moat,¹ but more usually this was wholly artificial. Stagnant moats seem to have been quite the exception, if they were ever purposely made in mediæval times; there was almost invariably a flow of water, slight perhaps, but perceptible. The old channels by which the supply was maintained and the overflow discharged are still traceable in many cases,² although neglect or the purposed blocking of the effluents has made a stagnant pool to-day of many a moat that was originally filled with running water.

As the builders of earlier times—Saxons and Danes and Normans—had made a point of selecting sites in the immediate vicinity of water, it naturally happened that occasionally the sites they had chosen were usurped by later builders, and mediæval moats now stand on or within the area of older fortresses. It is not unlikely that some of the circular wet moats may be but the modified remains of moated mottes, of which the mounds have been levelled far enough to suit the purposes of the mediæval builder.³ In some cases the latter seems to have adapted to his requirements the ditches of some pre-existing fortress of Norman type, leaving the mound and other works more or less to take care of themselves.

¹ There is a good example at Newnham Priory, near Bedford. This site covers 35 acres, the river Ouse forming one of the longer sides.

² Even where the old spring has not entirely failed, modern drainage operations have frequently piped it and buried it, so that the source of supply is no longer visible. The old culverts remain in many cases, mostly waterless to-day, and when accidentally lit upon by the rustic ditcher, lend substance to his favourite dreams of subterranean passages. Such culverts, built of brick and carefully concealed beneath the surface, belong rather to the military than the domestic moat. It was desirable to keep secret the source of their water supply, and only wealthy people could afford to construct them.

³ There appears to be an example of this at Peel Hall, Cheshire, which (as the name suggests) was probably a fortified post for the defence of the Welsh March; but the perfectly circular island may still preserve its original design.

Cranmer's Mount (Fig. 122) has been already mentioned. Two plans here given show what appear to be cases of such adaptation at Little Kimble and at Saunderton, two Buckinghamshire hamlets not 5 miles apart. In the case of Little Kimble (Fig. 164) the original mount

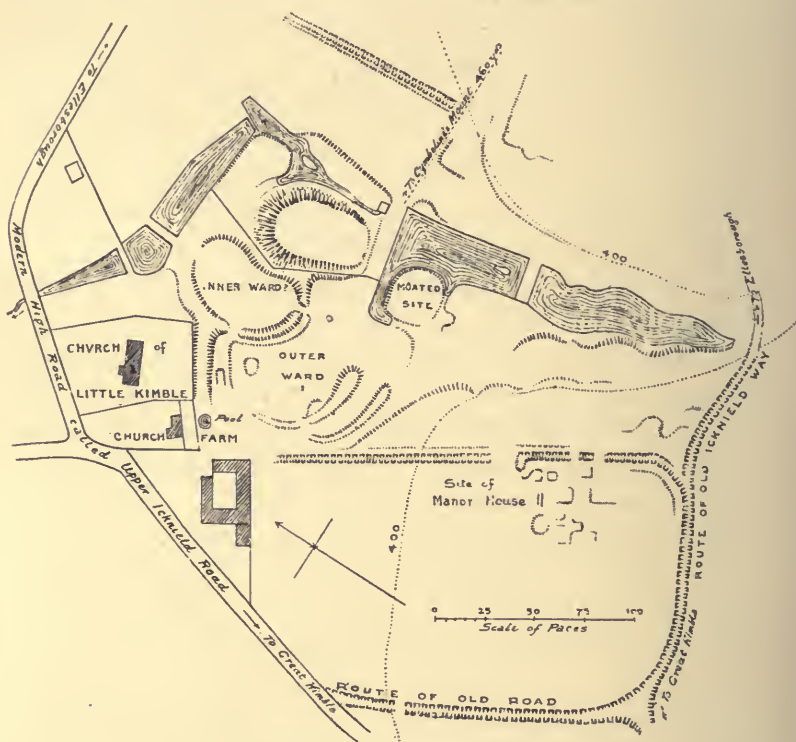


FIG. 164.—LITTLE KIMBLE.

still remains, and the baileys, albeit sadly defaced, are still traceable in great part.¹ In the case of Saunderton

¹ Remains of Roman character have been unearthed on this site (*Records of Bucks*, vol. i.), and quantities of stone—foundations, &c.—have been removed from the spot. Tradition declares that Queen Eleanor, who is said to have built (?rebuilt) the church, had a nunnery here, and it was long the site of a manor-house, of which the last representative was pulled down only at the beginning of the last century. The site of a small mediæval moat is plain enough immediately south of the great mound, as are the traces of the enclosing wall of the later manor-house further to the south. See also p. 413.

(Fig. 165) the mound is sadly shrunk, but the traces of at least one bailey, within which stands the tiny church, are quite obvious, while the other has been as

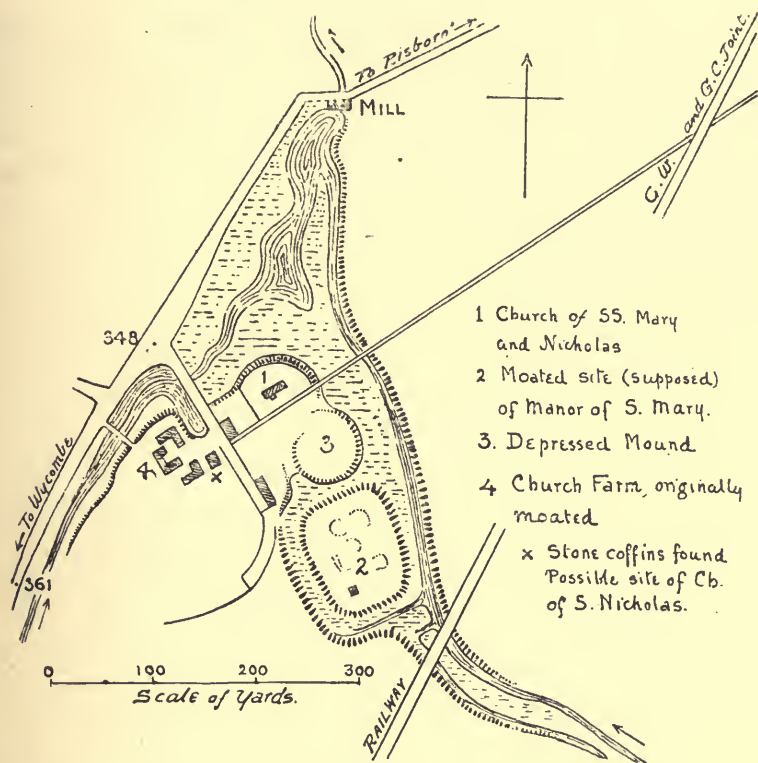


FIG. 165.—SAUNDERTON.

obviously converted into a moated site of exceptional strength.¹

¹ There were originally two manors of Saunderton (St. Mary and St. Nicholas), and two churches. One manor is said, with doubtful reason, to have stood on Lodge Hill; the other may very well have occupied the site south of the present church. [In a field somewhat to the east have been ploughed up fragments of Roman tessellated pavement.] Of the second church (St. Nicholas) there is no trace, but two stone coffins are said to have been dug up on the site of the present farm buildings. The moat which once surrounded the church-farm has only been filled in within recent

Certain deeply moated sites, with heavy earthen ramparts about their areas, are thought to be of very early date—Saxon or very early Norman. The later mediæval moat occasionally shows traces of a similar but much slighter rampart, which, however, in most cases represents nothing more than the remains of the wall, stockade or hedge, exactly as similar mounds within the area mark the sites of vanished buildings. The owner commonly secured his privacy by raising some sort of fence about his island-residence.¹ But many of the larger

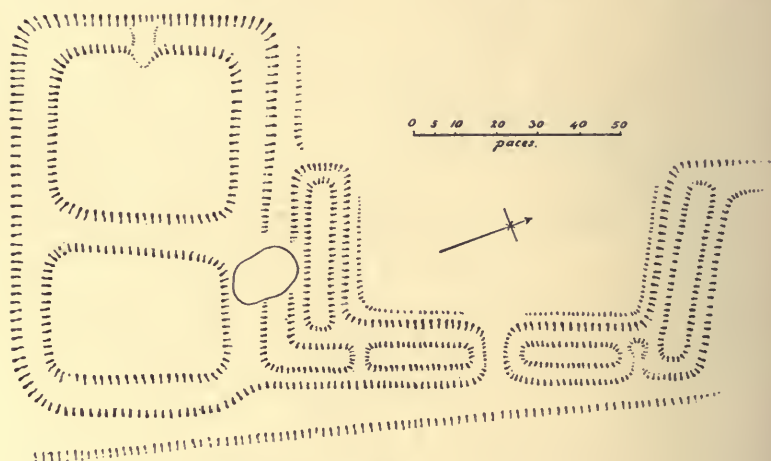


FIG. 166.—FORTIFIED MANOR SITE, SIBTHORPE.

moated sites of late date were fortified with formidable ramparts and complicated ditches. In Fig. 166 is shown the plan of part of a very large site at Sibthorpe, Notts,

memory. Half a mile away, in Roundabout Wood, in the parish of Horsenden, is yet another small moated site. Its ditch still holds water, but the spring which originally fed it no longer flows.

¹ The customary defence was a simple wooden palisade. Turner (*Domestic Architecture*, p. 14) gives a reproduction from a MS. of 1316, showing the moat, slight wooden bridge with handrails, wooden gate-house with towers and battlements, and palisades. Beyond the palisades is to be seen the residence. He cites also an entry from the Court Rolls of Ed. I.: "For 7 empty casks for the paling of the bridge, seven shillings and a penny." And this was the bridge of Rhuddlan Castle!

with unusually fine defences. It is probably of no great age as moats go. The site of Sir Harry Lee's mansion at Quarrendon, Bucks (1560), was entrenched behind an enormous wall of earth from 20 to 30 feet wide at its perfectly level summit, which rises 4-6 feet above the surface of the area, and extends for a length of 200 yards in one direction and 140 yards in the other, moated on either side. In a few instances the rampart is transferred to the outer side of the moat; or while both sides of the moat are ramparted, the stronger work is on the exterior. The site known as Berrysteads, Keysoe Park, Bedfordshire, stirrup-shaped in plan, has an area measuring about 100 yards either way. Round this runs a modest vallum, beyond which lies a moat 40 to 50 feet wide; and about the moat is thrown up another vallum of great size, in places 50 feet wide and 15 feet high. Works of this pretentious kind are outside the category of domestic moats properly so called.

The usual means of communication with the outer world was a bridge, originally a temporary structure which could be raised or removed when occasion demanded it. This was later replaced by a permanent structure of brick or stone. On many a moated site long since dry and defenceless still lingers the tradition that it was accessible only by a plank. The more permanent bridge was of course not built until the *raison d'être* of the moat had passed away, and very often the owner saved expense by simply filling up the moat at a convenient point, so making a passage for himself and his cattle. It was but a slight step further to remove the barns and stables to the further side of the moat, and turn their old site into garden or orchard. The final step came when, tired of the narrow confines and the inconvenience of his picturesque domain, or finding, perhaps, that the house which had served his forbears for so many generations was now past repair, he built

for himself a new residence more to his liking outside the moat, and, pulling down the older fabric, gave up to the trees and the grass the whole of the island's area. One can frequently fix the date at which the older site was abandoned by the style of the newer building. Of the older house, rarely a stone or a brick remains; the materials were used afresh to build the new home. The discarded moat, no longer regarded even as an ornament, but rather grudged as so much space lost to the grazier or the ploughman, gradually shrank. The neglect of the sluices, the accumulation of weed and reed from within, the constant tipping in of rubbish from without, filled up its fosse, and the gradual failure of the springs curtailed its supply of water. Its day was past, its disappearance but a matter of time. In too many cases there remains of it not so much as a tradition; in others a forgetful generation has attached to its vestiges some absurd tale of Cromwell and the Civil Wars, some name suggestive of a Roman or even older origin,¹ or talks idly of castles that once occupied the site, and of treasure buried within the area.

The persistence of some sort of homestead upon one spot is almost as remarkable as that elsewhere noticed in regard to towns. One constantly finds side by side not merely the discarded moat and the present-day house, but also the *vestigia* of intermediate houses that have long been forgotten. Thus the modern Givendale² is a picturesque farm of perhaps two centuries old; beside

¹ At Patchesham, near Leatherhead, Surrey, is a moated site of medium size, solemnly named a British camp by various writers. There is nothing about it in the least resembling British work, and nothing that does not resemble mediæval work. A few miles away to the north, buried in a wood near Chessington, is an earthwork which may be anything except Roman. It is persistently styled a "Roman camp" by the makers of books, on the convincing evidence of a solitary coin there discovered. *Quid plura?*

² Sir Simon Ward, of Givendale, was one of those who fought and fell at Bannockburn.

it at the foot of the slope lies the original moated site (Fig. 155); while the whole of the ground about is seamed with trenches and mounds marking the sites of spacious buildings of intermediate date. At Walk-

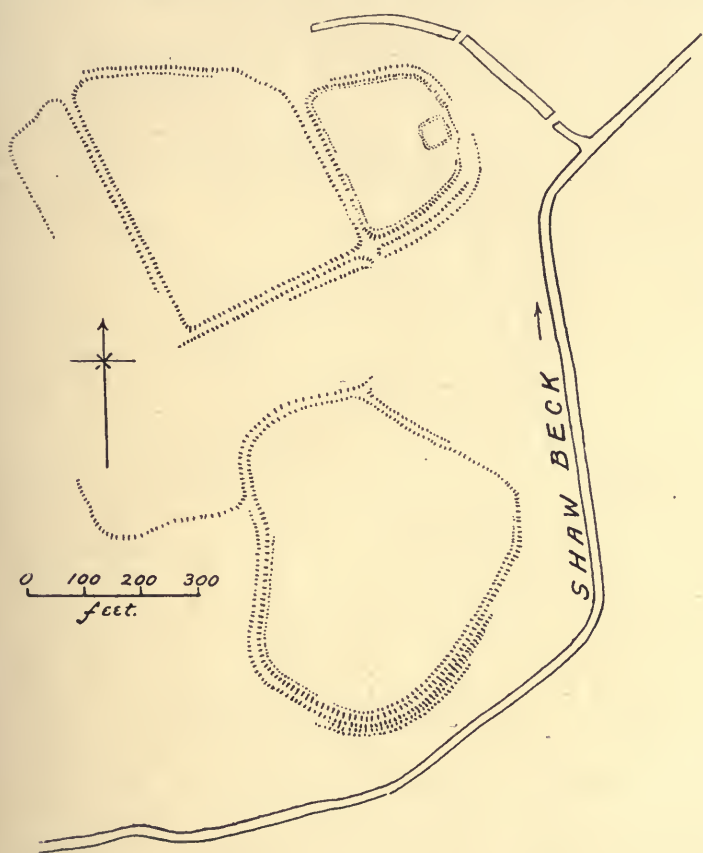


FIG. 167.—MOATED SITES, WALKINGHAM HALL.

ingham, between Ripon and Knaresborough, is an exactly similar but more extensive group (Fig. 167).— In a water-meadow on the bank of the Shaw Beck lie two deserted sites. The older of the two is oval and of great size, but the other is of rectangular design and of quite extraordinary dimensions; while upon the northward slope overlooking

both stands their modern representative, known as Walkingham Hill Farm. Alike at Givendale and at Walkingham, it will be noticed that the older work lies nearer to the water, is less regular in plan, and is of smaller size, than that which superseded it; while the modern house is still further away from the water, smaller than any of its predecessors, and, of course, of strictly

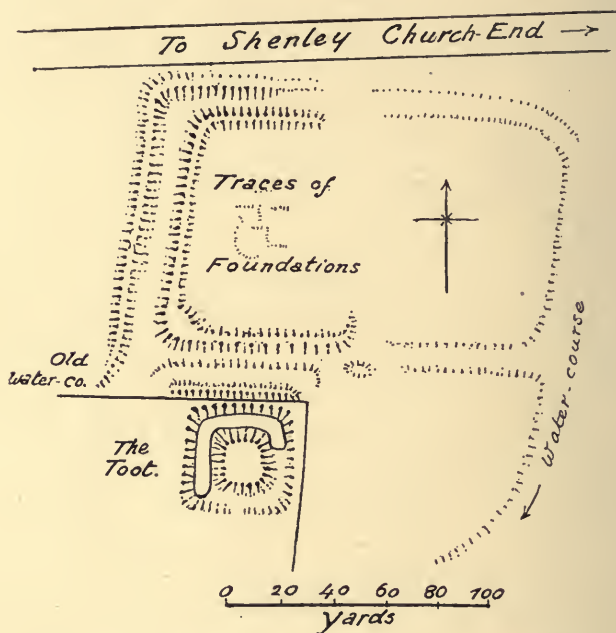


FIG. 168.—MOATED SITES, SHENLEY CHURCH END.

rectangular plan. These are the regular characteristics of the successive developments of the homestead. At Shenley Church End (Fig. 168), Bucks, may be traced another example of development. The principal earthworks are the remains—*islands*, wide moat, and heavy containing vallum—of a mansion covering several acres, while contiguous, and indeed almost within the precincts of the larger site, is a diminutive island, heavily moated and artificially raised to an unusual height. Measured along

the outer edge of the moat, this is a square of no more than 45 yards. It appears to be the original site, subsequently superseded by the larger.¹

Besides these cases of duplicated moats, explicable as merely earlier and later phases of the same homestead, it is not at all uncommon to find two or more moated sites of considerable size, quite independent one of another, in the same parish or even in the same village.² Sometimes these will be contemporary works representing the sites of different manor-houses; for the same parish, as in the case of Saunderton, was frequently parcelled out amongst two or three manors, and at Sibthorpe, Notts, there were as many as five. In other cases they are of different dates, for as time went on and the moat came to be no longer the special mark of only the greatest houses, there might well be in the same village several families of dignity and means sufficient to build moated residences, without taking into consideration the multitudinous moated houses—priors, granges, and what not—belonging to the Church.

Where local conditions made moat-building easy, it is not unusual to find, besides the principal moat enclosing the homestead, a subsidiary moat embracing a much larger area. Such subsidiary streams are, of course, fed from the same source as, and are connected with, the main moat, but as a rule they are of less width and depth, although they may be of sufficient extent to include several acres of paddock, garden and orchard. In Essex there are three instances in which the moat is so extensive

¹ The manor of Church End was in the hands of the Vache family, *temp.* Ed. I., thence passing to the Greys, Daubeneys (1505), Pigots (1520), and Ashfields (1563). To these numerous changes of ownership there doubtless corresponded considerable changes in the residence. The site, needless to say, has been claimed as a "Roman camp."

² The occurrence of moated sites of less dignity in groups was mentioned in the footnote to p. 456. Of larger moats there are, or were, no less than five within the single parish of Arlington, Sussex.

as to include within its circuit not only the great house, but the church and the entire village also; viz., Mundon, Hazeleigh, and Canewdon. Grove Farm, Ashley Green, Bucks (Fig. 169), is a fine example of a double moat, in which the outer works are not merely more extensive than the inner, but also wider and deeper. This was once a manor-house of the Cheyne family. In an old barn upon the inner island are embodied the scanty remains of the original house, and there are still to be seen the ruins of the

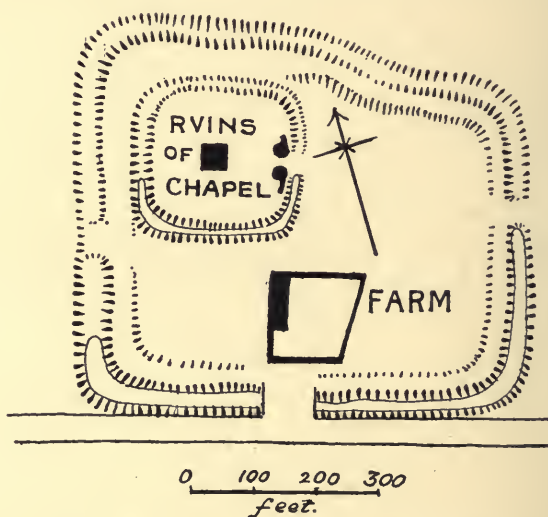


FIG. 169.—GROVE FARM, ASHLEY GREEN.

once fortified gateway. The outer moat is unusually large and well preserved. Moated houses of such pretentious kind merge into the moated castles spoken of in an earlier chapter. It is, of course, impossible to say at what precise point the house ceases to be a house and becomes a castle, or *vice versâ*.

Where the moat is double, the inner island usually occupies one corner of the larger area, one ditch sufficing to protect two sides of both enclosures. There are good examples at Bigginwood and at Moggerhanger, Beds. But

there is no hard and fast rule. In another Bedfordshire site, The Camps, Bushmead (Fig. 170), the inner area, while occupying a corner of the main enclosure, nevertheless has its own ditch carried completely round it, so that on two sides it is covered by two parallel ditches with only a narrow bank of earth between them. Very similar is the arrangement at Ashley Green (Fig. 169).

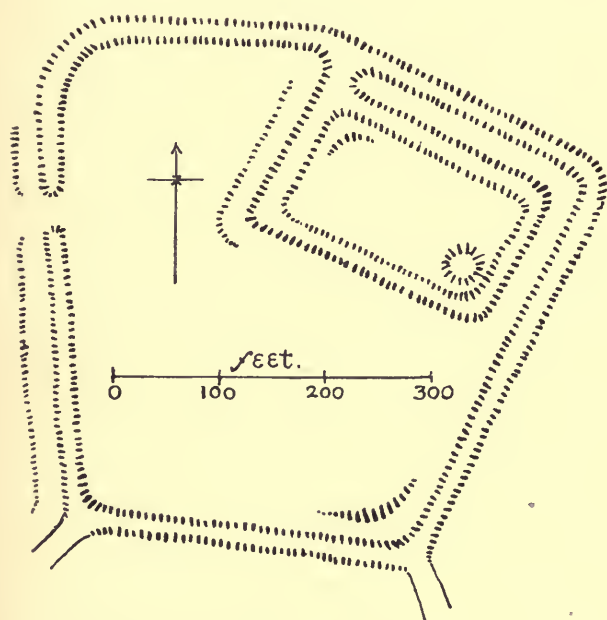


FIG. 170.—THE CAMPS, BUSHMEAD, ST. NEOTS.

At Share Farm, Horsmonden, Kent (Fig. 171), is an unusual example, with concentric quadrilateral moats, the interspace ranging from 30 to 80 feet, while the whole is rendered yet more secure by its lying within the angle formed by the confluence of one stream—the Teise—with another, these two forming as it were a third moat which very nearly surrounds the entire site.

It was in "the spacious times of Great Elizabeth" that Englishmen began to feel the bounds of moats too narrow

for them. With the suppression of the bands of armed retainers by Henry VII. had ceased in theory the need of any moat at all, and though the theory might not coincide with the facts of life in the fifteenth century, by the end of the sixteenth century the general security was such that the further building of moats was abandoned,

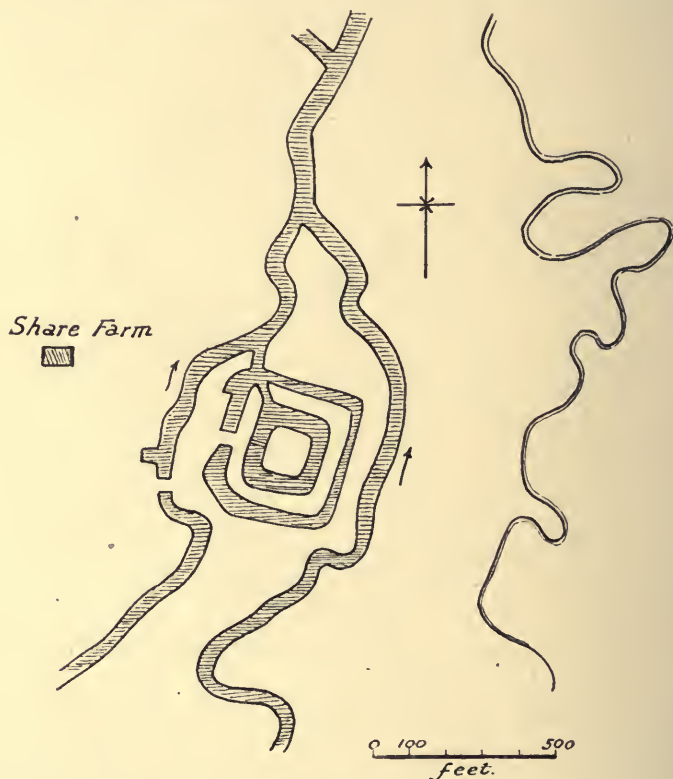


FIG. 171.—SHARE FARM, HORSMONDEN.

or if practised at all, practised rather as a tradition or as an affectation. With the accession of James I. came peace even to the long vexed Border. Moated houses enjoyed a transitory revival of utility in the times of the Civil War, when many of them stood siege for the King or for the Parliament; but whereas they had been devised

by a generation which knew of no weapon more formidable than the crossbow, they had now to face artillery, against which no moat was of much use, and in spite of the valour of the defenders they were proven useless under these new conditions of warfare. This, coupled with the larger ideas of the newer generation, caused them to be relegated to the lumber-room of antiquities. The very spacious notions cherished by Francis Bacon, as set forth in his essays *Of Gardens* and *Of Houses*, may not be exactly true of other and less magnificently ambitious men, but they reflect accurately enough the general expansiveness of the time. Moated sites were not roomy enough for such a time; they were no longer useful; they were too familiar to be fashionable, and they were too expensive to be constructed on a scale commensurate with men's enlarged ideas. Here were good reasons enough for doing away with the moat altogether. So moats ceased to be dug, and the country gentry contented themselves with high-walled gardens close at hand, and further afield parks ringed within walls of less height but of immense amplitude. The castle had long been a thing of the past; the monastery had followed it; now the moated house went the same way, and the making of earthworks ceased in England, to be revived presently by the "navigator" in the service of canals, of railways, and of water-companies.

There was one other adjunct to every house—ecclesiastical, military, and domestic alike—which has left here and there its mark upon the soil, viz., the fish-ponds, or "stews," which in pre-Reformation days were an essential part of the establishment. Even Chaucer's franklin had "many a bream and many a luce in stew," and that not solely because he loved good living. There being no other means of ensuring a supply of fresh fish for Lent or other fast-days, and salt fish being in those days mostly "a kind of not of the best poor-John"—strong stuff which

only the strongest of stomachs could negotiate—such as could afford it preferred to make and maintain fish-ponds of their own.¹ The method necessarily varied with the locality, the one essential being an unfailing supply of water in constant circulation. Sometimes the moat itself, if large, might serve as fish-pond too: there are still moats which yield bream and luces in plenty, not to mention smaller fish. But as a rule the stews and the moat were separate. The simplest plan was, where a convenient stream was available, merely to construct, by digging or damming, a series of ponds along its course, so that the water flowed naturally from one to another. There is a series of such ponds at Warnham Place, near Horsham, once a religious house; and the ponds in Chequers Park, Little Kimble, were originally dammed for the same purpose, albeit now the water serves only to feed a pumping-engine. The well-known Waggoner's Wells at Hindhead—the name is a perversion of that of Wakener, their constructor—are of the same origin. Such convenient water-courses, however, were the exception, and in most cases it was necessary to construct artificial channels to ensure the supply. Considerable skill was shown in the manner of getting the largest result for the least labour. There is an example on the farm known as The Trenches, Langley Marish (Fig. 172). The site of the old house with its surrounding moat—a large one, enclosing upwards of an acre and fringed with ancient trees—lies a quarter of a mile away from the fish-pond, which is an oblong excavation measuring about 90 × 50 yards, or close upon an acre. The central area, now overgrown with osiers, is divided into a number of separate “pans,” all communicating with a deep water-course surrounding the

¹ The situation of so many of the old religious houses on the banks of streams was directly determined by the necessity of an adequate supply of fresh water, not so much for drinking or for washing, as for the stews, the number and capacity of which varied directly with the dignity of the house.

whole. The channel by which the supply was brought to the pond, and the effluent by which it escaped after circulating through the successive pans, are still in working order. The soil dug out in making the stews was thrown up to form a broad retaining bank along the southern and eastern side, forming in places amorphous mounds—locally “The Trenches”—which are, as usual, attributed to the ubiquitous Cromwellians. Stews of this

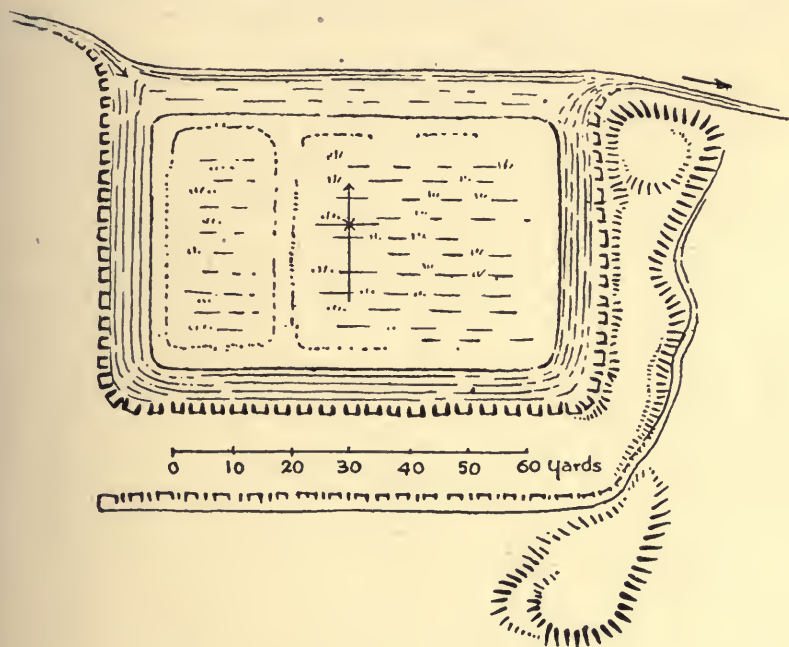


FIG. 172.—FISH-POND, LANGLEY MARISH.

type have in many cases been utilized as watercress beds. The second illustration (Fig. 173) shows the plan of a similar pond at Flamborough, Yorks. Fig. 174 shows the arrangement of the moats and fish-ponds of what was once a manor-house of the Suttons at Rolleston, Notts. In this instance the ponds were evidently fed direct from the stream which supplied the moats, as also at Sibthorpe (Fig. 175) in the same county. This is a particularly

elaborate series, and one of the ponds, square in plan and surrounded by double banks of very unusual height

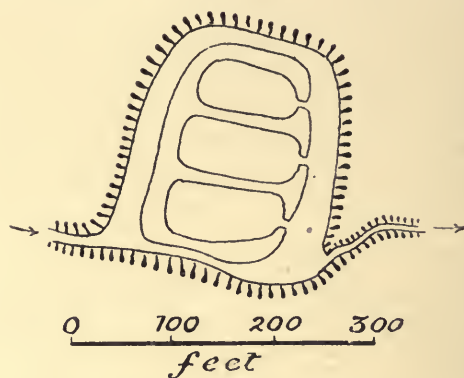


FIG. 173.—FISH-PONDS AT FLAMBOROUGH.

and thickness, is of exceptional design. These belonged to a manor-house of the Burnells of the sixteenth cen-

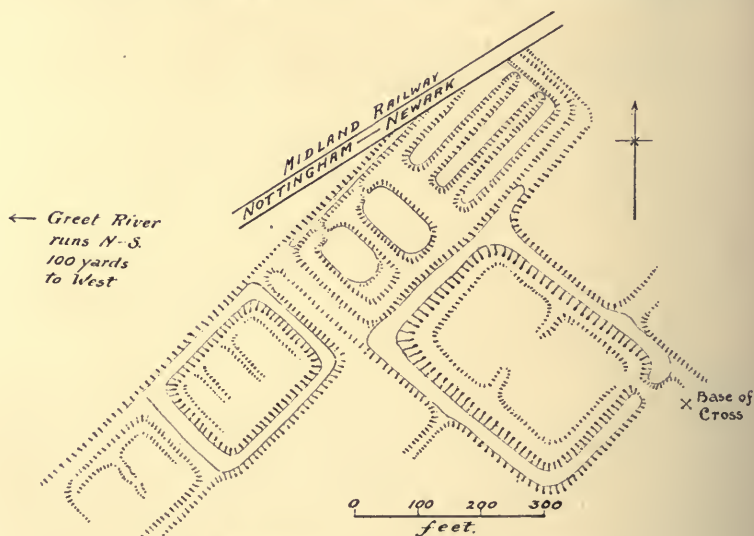


FIG. 174.—MOATS AND FISH-PONDS AT ROLLESTON.

tury. The fish-ponds at Limbury Manor, near Luton, Bedfordshire, of unusual extent and complexity, are

known to have been in existence as early as the days of Edward II.

Rarely of any great depth, such fish-ponds have mostly vanished completely under the plough, and where any trace of them remains it is generally no more than a series of shallow rectangular depressions,¹ of which the rectilinear arrangement at once catches the eye of any one who has learnt to look for such things. Although doubtless maintained in many cases for some time longer by such families

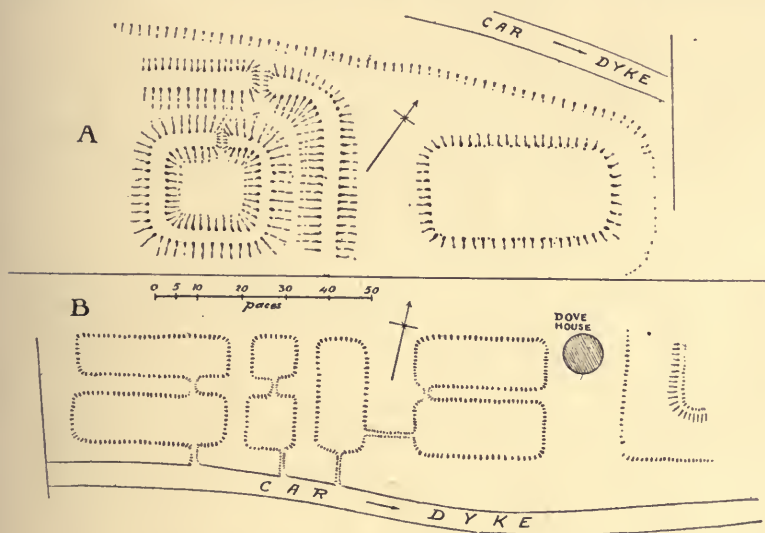


FIG. 175.—FISH-PONDS AT SIBTHORPE, NOTTS.

as held by the old faith, mostly they disappeared at the Reformation, and probably very few were built after that date.² Seeing that $3\frac{1}{2}$ centuries have elapsed since then,

¹ Occasionally the ponds are so much raised that they can only have been filled with water by machinery; e.g., the square pond in Fig. 175 A. At Higham Gobion, Beds, is a series of three similar ponds of oblong plan, associated with an anomalous enclosure of 3 acres, which would seem to have been an ornamental lake, with a considerable mound in the middle. The site is now dry.

² It is recorded of one Charles Cecil, who died as late as 1725, that he "built all the fish-ponds" at Snape Castle. There are instances of fish-

it is no marvel that their traces are but few. It is much more remarkable that nowadays no one thinks it worth while to cultivate fish in the old way. That salmon and trout alone amongst freshwater fish deserve to be bred and eaten is one of those groundless prejudices which pass unchallenged because they are so inveterate. The man who has caught his own basket of perch (half-pounders, if luck will have it) before breakfast, and eaten them grilled "in their jackets" within an hour or so, will never again sneer at such "coarse fish," or envy another man his trout.

Though they be the youngest amongst the more important classes of English earthworks, and by far the commonest, these moats possess a charm and appeal which is perhaps for that very reason more intimate and real. Here at any rate dwelt men and women of our own immediate kin, the good knights and yeomen who fought upon a hundred fields from Crécy onwards, and who now lie within the churches, some in black suits of cullen-plate, some in white cerements of alabaster, but all stately still, and bearing themselves like men—like that delightful, proud old warrior, Sir John Clerk of Thame, who has caused to be engraved upon his brass only that he "toke Louys of Orleans, Duk of Longueville and Marquis of Rotuelin, prysoner on ye Jorney of Bomy by Terouane,"¹ in 1513, leaving to others to inscribe elsewhere the record of his less militant virtues. Within the straitened precincts of such a moat doubtless dwelt alike Chaucer's far-ridden "veray parfit gentil" knight, and his "frankeleyn" with the "complexioun sangwyn" begotten

ponds built during the eighteenth century for ornamental purposes, perhaps in fancied imitation of Roman habit—an affectation which otherwise vented itself in building obelisks, classical temples, grottoes, and similar follies.

¹ *I.g.* the Battle of the Spurs, more familiarly known in its day as *La Journée des Éperons, de Guinegate*, or some such synonym. Sir John's prisoner was Commander-in-Chief of the defeated French, and for this service was Sir John knighted.

of many a sop-in-wine taken betimes "by the morwe." In such a setting one thinks of slender girls and stately women, the mothers of a very crowd of home-keeping sons and daughters, that kneel meekly with clasped hands on either side of their parents' effigies—the women who now and again rode a-hawking with Dame Juliana Berners' instructions at their finger-tips, or whiled away their rare spare hours with *Plato his Phaedo* or *Euphues his England* or Sidney's *Arcadia*, or the thin music of the virginals, but for the most part lived strenuous days of infinite quietude amongst their embroideries, their herbs, and their babies. They are all gone now, and their quaint old houses of sound red brick-work or of stone, and many gables, are mostly gone with them; the sluices have broken down or become choked, the moat is stagnant, the garden with its warning sundial and its long hedge of yew, changeless the year through as were their own unrecorded lives, has vanished under the grass; and where once walked only sweet culture and grave courtesy, now one meets, if one is fortunate, no soul at all, or if one is less happy, some impatient interloper hot-tongued to know the reason of your trespass amongst his cowslips, or some yet more earthy son of earth with fatuous talk of treasure buried and of castle vanished. But down in the moat itself still haunt shy birds, and upon the grassy mound grow rare plants, pitiful survivals whose forebears were doubtless watched over by bright eyes that answered to the stately titles of Dame and Lady and Mistress.

"And this delightful herb, whose tender green
Fledges the river's lip on which we lean,
Ah, lean upon it lightly, for who knows
From what once lovely lip it springs unseen!"

CHAPTER XV

DYKES AND DITCHES

“Men shall say with fearful wonder, ‘He hath digged the earth in sunder;

*With the valleys and the mountains he hath girded him about.’
It shall be to them a sign, all within this mark is mine;
And whoso will may call him lord of all that lies without.”*

THE Devil has extensive property in this country—Cheesewrings and Punchbowls and Dens, Causeways and Highways, Bridges and Jumps and Leaps, even a Churchyard in Oxfordshire, and in Yorkshire a Cross¹; but most numerous amongst the catalogue of his possessions are his Dykes and Ditches.² By an accident of language, the word “ditch” is merely a synonym for “trench,” but “dyke” may signify either a fosse below, or a vallum above, the earth. In Lincolnshire the smallest gutter that bounds a field or a road, and the huge cuts, wide and deep as rivers, which carry off the waters of the fens, are alike “dykes”; in Yorkshire the stone walls which parcel out the moors and fells are “dykes”—“dry dykes” for

¹ The Devil's Cross is a large tumulus 3 miles from Aldborough (Isurium), said to have once carried a miliary. The word *devil* is here a corruption for *deuil*, the Roman stone having in later times been mistaken for, or possibly converted into, a *weeping-cross*.

² The two words are merely variants from the same root, “to dig.” The intermediate links are still in local use: *dyche* is the pronunciation in Salop, *dick* in Buckinghamshire.

distinction. But where the Devil is owner it is almost always a vallum that is thought of. It is true that there can scarcely be a vallum without a fosse, but man seems to have instinctively a greater admiration for that which rises above the soil than for that which falls beneath it; and Nature abets his preference. Her forces are far more active in levelling up the one than in levelling down the other, and in many cases there remains no sign of any fosse while the vallum still raises its back—*dorsum immane*—above the surrounding ground, inert, uncouth, inexplicable most likely, but not to be overlooked by the least observant.

There are few counties which cannot show something in the way of dykes and ditches. There are Devil's Dykes in Norfolk, Cambridgeshire, Yorkshire, Oxfordshire, Hampshire, Dorsetshire, and Sussex. Grim's Dykes or Grim's Ditches occur in Wilts and Dorset, Hertfordshire, Buckinghamshire, Oxfordshire, and Berkshire. Often the same earthwork bears the name of Grim or the Devil indifferently, as in Buckinghamshire and Dorset. There are scores more which bear individual names: Medlar's Bank (Oxfordshire), Combe's Bank and Gudgeon's Bank (Dorset), and Bunn's¹ Bank (Norfolk); Black Dykes (Norfolk, Northumberland, and Yorkshire²), Bran, Brand, Brant, or Brent³ Ditches (Essex, Cambridgeshire); in Cornwall a Giant's Hedge, in Cumberland a Bishop's Dyke, and on the Malvern Hills the Red Earl's Ditch;

¹ Probably for *Bund* (i.e. "boundary") Bank.

² The "Black Dyke" of Yorkshire, otherwise known as the Scots' Nick, Road Dyke, or Sixon's Loaning (Saxon's Lane), commences at the northern bank of the Swale between Richmond and Easeby, and runs with more or less completeness continuously northward across Northumberland into Scotland. It resembles a broad, sunken way with a bank on each side, very like the Catrail (see below), of which, according to one view, it is a continuation.

³ *I.q.* "steep." The word occurs as late as Ascham's *Toxophilus*, and has no connexion at all with "burnt" (Prof. W. W. Skeat, *Place Names of Cambridgeshire*).

Oxfordshire has an Aves Ditch,¹ Dorset an Achling Dyke, Cambridgeshire a Fleam Dyke and a Fen Dyke; along the Welsh Marches lies Offa's Dyke, with its lesser neighbour, Watt's² Dyke; and the famous Wansdyke³ traverses half the breadth of England from Berkshire to the Severn Sea. But when all is said, the Devil and Grim between them own the lion's share, and saving in point of length only—in which respect Woden outdoes him—the Devil's share includes the most formidable and the most impressive of them all.

Of some of these various works the date and character have been already discussed, *e.g.* the Dyke Hills at Dorchester (Oxon.), Ponter's Ball near Glastonbury, the Danes' Dyke on Flamborough Head, Wansdyke, and Bokerley Dyke. In Cleveland there are numbers of small dykes, many of them built of clean stone, which are thought to be similar to the Danes' Dyke in age and purpose. Canon Atkinson⁴ remarks that they cross the ridges between the dales, in lines always double, often treble, and sometimes quadruple, invariably facing to the south. He thinks that they may have some connexion with the strong fortress on Eston Nab, the dykes being apparently designed to block the approaches thither from the interior and the south. The date of a few others may be regarded as fairly certain. The Graeme's Dyke, or Wall of Antonine, traversing Scotland from the Forth to the Clyde, is admittedly a Roman work. Roman, too,

¹ Said to be a corruption of Offa's Ditch, but dubiously. It has other local names, *e.g.* Ashbank and Wattlebank.

² "Watt" is said to represent "Wato," the father of the Scandinavian Weyland, so that Wato's Dyke is analogous to Wansdyke (= Woden's Dyke). But Wat or Watt was once a synonym for a Welshman, as Pat is still for an Irishman. Hartshorne derived it, as he would derive anything, from a Celtic source, viz. *gwaeth*, "less," "inferior," *i.e.* as compared with Offa's Dyke.

³ See above, p. 372. The name of Woden's Dyke still attaches unaltered to a small dyke $1\frac{1}{2}$ miles south of Linkenholt, in Hampshire.

⁴ *Forty Years in a Moorland Parish*, pp. 153-160.

for the most part, is the greater Wall of Hadrian, although this may owe something of its existing form to other hands earlier or later. The Grim's Dyke of North Oxfordshire Pitt-Rivers fancied to be a Roman work, intended to cover the northern flank of the Akeman street, but Prof. Haverfield asserts that the road overlies the dyke, which must therefore be pre-Roman. A high bank running north-west from the old north gate of Chichester was found to contain a piped water-course, to be, in fact, an aqueduct.¹ Offa's Dyke is probably much as Offa left it, towards the end of the eighth century, as the boundary between his kingdom of Mercia and the troublesome Welsh, though it may well be that he to some extent availed himself of pre-existing earthworks of unknown age and purpose. Tradition declares that Watt's Dyke was an earlier work of the same king. The two run, more or less parallel, from the Dee in Flintshire, to the mouth of the Wye in Gloucestershire, sometimes as much as 3 miles apart, sometimes as little as 500 yards. Watt's Dyke is a less imposing work than Offa's Dyke, shorter and smaller. Its height is at the most $11\frac{1}{2}$ feet, with a fosse of 7 feet in width, and its length about 37 miles. Offa's Dyke rises in places as much as 15 feet, the ditch being 11 feet wide. In each case the ditch is on the western side, which must be taken as proof that the original builders, whoever they were, dwelt to the east of the dykes. Bishop Creighton thought the Catrail—the largest of the Scottish dykes, extending for 50 miles across the shires of Selkirk and Roxburgh between the Cheviots and the Tweed—was perhaps Saxon work, erected by Æthelfrith of Northumbria after his victory at Daegsastan (603) to be his northern frontier-line. It is a wide and deep trench with a rampart on both sides.² The Red Earl's

¹ *Gentleman's Magazine*, 1816, Part ii., p. 20.

² See Christison, *Early Fortifications of Scotland*, pp. 358–363. Writing in *Antiquary*, June, 1908, Ed. Wooler, F.S.A., definitely pronounces it to be a military work. It is probably pre-Roman, as is the Black Dyke.

Ditch (called also the Shire Ditch, because for some distance it forms the boundary between the shires of Worcester and Hereford) was in the thirteenth century the boundary of the estates of the Bishops of Hereford and those of the de Clares of Gloucestershire, but there can be little doubt that the work itself is far older than that date.¹ It may be that the Saxons employed this method of marking the boundaries of neighbouring kingdoms, and some of the existing dykes may be of Saxon construction. But, speaking generally, they are of proportions too great to have been erected merely as boundary marks. The immense size and peculiar disposition of many of them are only reconcilable with the theory that they were primarily military works, and everything that is learnt about the more important of them goes to prove them of very great antiquity. Unquestionably, the Saxons on their coming found many of the dykes already built, and made use of them occasionally as boundary-marks, or embodied them in newer defensive works, as King Offa seems to have done. Of the minor dykes little more can be said than that they may, some of them, be of later date than the larger works. The habit of building walls, for whatever purpose, did not originate with Balbus, nor did it end with him.

Excepting what was done by Pitt-Rivers in connexion with the Wansdyke and Bokerley Dyke, there has been very little attempt to determine the age and origin of earthworks of this class. The task is one of quite exceptional difficulty and cost, and perhaps another

¹ "Matilda de Mules, 10 Ric. I., owes one mark for license to make a ditch between the wood of Serleby and the fields." This may be the so-called "Roman Bank" running north to south for $1\frac{1}{2}$ miles between Blyth and Scrooby, Notts, 3 miles north of East Retford. Its fosse forms a roadway between the two villages. In any case the citation shows that such dykes were constructed as boundaries of estates in the twelfth century, and were matter of royal license. I quote from Mr. W. Stevenson, in *Vict. Co. Hist. Notts.*

reason for avoiding it is that it promises little hope of any material "finds," so that the dykes go for the most part unnoticed.

Nomenclature, while mostly giving no clue at all to their origin, points only to the immense antiquity of the more remarkable of them. This is the atom of solid fact underlying their attribution to the Devil or to Grim. Grim and the Devil are Tully and Cicero; they are one and the same, and of the two names Grim is the older. Dr. Guest sought to derive the name from the mediæval *gruma*, "boundary," a word which reappears in the Scottish clan-names of Graeme, Grahame, and Graham, families which took their names from the Grim's Dyke¹ near which they were settled, *i.e.* from the Wall of Antonine; for the legend which declares that the clan-name was given in compliment to that valiant Scot who, when at last the Romans fell back from their frontier-line, was first to scale and cross the Wall, has no better basis than similar legends which claim for others of the clans the use of private boats at the Noachian deluge.

A Grim's Dyke, then, meant originally a "boundary dyke." It was the common Saxon name for any of the great earthen valla of the map, whether the Saxons at their coming found them already built or themselves erected them. But in the rapid flux of dialects of that period, words and names, and the meaning of names, passed quickly out of memory. So it was with *Gruma*, *Grim*, or *Graeme*. The word remained, but its meaning was forgotten; the dead name stuck, as names will, to

¹ The name of Grim's, Grime's, or Graeme's Dyke occurs in Scotland, but the longest and best known of Scottish dykes bears the peculiar name of the Catrail. The Wall of Antonine was locally known as a Graeme's Dyke. Inasmuch as its construction was sometimes attributed to Severus, bygone antiquaries fancied they had therein found the origin of the name of Grim; it was, they asserted, merely an Anglo-Saxon translation of the Roman Emperor's name Severus (*obiit* 211), "the stern," "the grim"!

this or that dyke, but the living word passed out of the vocabulary. But there was another very similar word of greater vitality, *Grima*, "a goblin." This was dragged in to explain the other, and Grim's Dyke was interpreted to mean Goblin's Dyke. A few generations later, when Christ had ousted Woden, and Satan had usurped the thrones of all the collective devils of Saxondom, Grim was retranslated into Christian language, and took final shape as the Devil. In some cases the older name has prevailed, in others the younger, and in not a few instances the two survive side by side. To the Devil's better known properties must be added, therefore, such others as Grim's Dykes wherever found, Grime's Graves in Norfolk, Grimsbury Camp in Berkshire, and Grim's Pound on Dartmoor.

Of all Devil's Dykes so called, the best known is doubtless that on the Sussex Downs, 5 miles north-west of Brighton, albeit the squeamishness or the indolence of these later days tends to ignore all reference to Satan and to speak of it simply as The Dyke, thereby consigning to oblivion yet one more fragment of our scanty folk-lore. For the name is a happy example of the genesis of a legend: it carries with it a faint odour of days when the powers of heaven and of hell were more real than now they are, when fancy could still flower, and the dictionary had not entirely superseded the imagination. For this reason it is here described, although it is in truth no dyke at all, but a part of the ceinture of a British camp of quite normal type.¹

¹ The names of dykes, ditches, and banks constantly attach to fortresses of British or other date. Clovelly Dykes, Devon, is a particularly fine and elaborate British camp, and the earthworks at Lexden, Essex, sometimes known as Grime's Dyke, were apparently part of the defences of the British *oppidum* which preceded Camalodunum. Castle Dykes, near Ripon, is a Roman station. At East Hope, Salop, is a camp known as "The Ditches"; in Cambridgeshire is "War Ditches"; a "Castle Ditches" occurs at Tisbury, Wilts; and the lines round the ancient Ratae (Leicester)

From the main mass of the Downs juts out towards the north-east a tongue-shaped spur, the crest of which, 700 feet above sea-level, marks the highest point in the vicinity. From the base of this spur, only some 1,000 feet across, the adjacent ground trends almost imperceptibly down to the south, but upon all other sides the slopes are unusually abrupt, the ground falling immediately to the 300-foot level, and thence more gradually to the yet lower level of the Weald about Poynings. Especially abrupt is the descent upon the eastern side, where the spur is divided from the opposite high ground of Summer Down and Saddlescombe by a narrow cleft in the chalk, 300 feet in depth and at its widest not more than 1,100 feet across. Amongst the gently rounded curves which mostly characterize the Downs, the steepness of this narrow combe, not less than its length, makes it singular and compels remark. The isolation of the spur, and its steep sides, marked it out as the most defensible position in all the South Downs, and here accordingly a forgotten race constructed for themselves a fortress (Fig. 217). Across the base of the spur they drew a mighty fosse and vallum, and round the hill-top, almost exactly at the 600-foot contour line, they carried another less formidable rampart, enclosing in all an irregular oblong space of 2,300 feet in length and 1,000 feet at its widest—a very respectable area as camps go, and more than commonly secure from attack. The great south-westward vallum, despite the storms and desecrations of unnumbered centuries, is yet a mighty and impressive thing.

It was mightier still when, 1,500 years ago, the South Saxon first saw it, and named it the Grim's Dyke. *Gruma*, the boundary, in due course changed into *grim* the goblin,

are known as the Row, Raw, or Rath Ditches. "Bank" occurs at Wanlud's Bank, Bedfordshire, Belan's Bank, Salop, Gadbury Bank, Worcestershire, Castle Bank, Glos., Ambresbury Banks, Essex, and The Banks near Wem, Salop.

and this in turn to the Devil; and just as an earlier generation had misunderstood the earlier name, so a later age sought an explanation of the other. Demand provoked supply, and the modern tripper may purchase on the spot for a modest sum this most veracious explanation.

The Devil, it appears, was sorely troubled by the rapid growth of churches throughout the Weald; and truly one may see a goodly number from the Dyke, churches of all ages and all dignities, from the tiny Hangleton on the southward slope and the ambitious pile of Poynings at the Dyke's northern foot to a score that dot the lowlands to north and west. Resolved to put a period to this trespass upon his ancient domains, he fell a-digging in the darkness, meaning to cut a channel through the Downs to the sea, and so lay the Weald with all its churches under water. He toiled valiantly—is not his work to be seen to this day, the great combe driven far into the hill?—but pausing to take breath, and casting backward an approving eye upon his progress, he caught sight of a gleam of light. “The Dawn!” cried his guilty conscience; and without second thought he abandoned his enterprise and disappeared. Yet he had seen nothing more than the gleam of a candle in some old woman's cottage.

So far the tale. That it is of very modern invention matters not. The interesting thing is that the later generation which coined the story was no wiser than those older folk who forgot the true meaning of Grim. The modern myth-maker had likewise forgotten the meaning of Dyke. Forgetting that it might mean a wall, he misinterpreted it in its other sense of a ditch, and the name which rightly belongs to the great artificial vallum on the hill's top he has transferred finally to the purely natural combe below. So the visitor comes, gapes, and goes away, probably little enough impressed, and not one in a thousand notices the real Dyke, the abiding

monument of those untutored engineers of the Neolithic Age.¹

Tempora mutantur. Here the Neolithic Downsman shepherded his primitive mutton, herded beeves innocent of all pedigree, baked the pottery and chipped the flints which still litter the ground, keeping the while a watchful eye upon his friend the enemy on Wolstonbury Hill to the north-east and Thunderbarrow to the westward, what time a deeper sea washed the very feet of the Downs to the south and ran far up by Lewes and by Bramber into the outstretched forest of the Weald ; for Neptune could and did himself do then what the later Devil failed to accomplish, and his tides swept daily up amongst the oaks that were fated one day to build the ships and forge the guns which should wrest his trident from him and should substitute for the Britons' log-canoe and spear of flint the three-deckers of Nelson and the cannon of Trafalgar. The bits of flint and the broken shards of the older race are treasures for our cabinets to-day. Will ever the day come when men will treasure the leavings of those who haunt the Dyke to-day ?—pick up the fragments of the trippers' shattered beer-bottles, study the earthworks which the golfer has constructed, debate the purpose of some remains of switchbacks, funiculars, bicycle-railways, aerial flights, and band-stands, and seek to reconstruct the plan of the marvellously ugly buildings which now stand within the camp ? If that time should ever come, then will vulgarity be dignified at last.

The association of ancient earthworks, in the mind of the Saxon, with goblins and devils is easily understood. A conquering race is apt to regard the conquered as beings of unwholesome kind. The lower the civilization of the

¹ The real name of the vallum amongst the few who recollect it is the Poor Man's Wall. The origin of this name is quite unknown. In West Sussex, between Chichester and the Arun river, is a series of genuine dykes variously known as War Dykes, Grim's Dyke, and Devil's Dyke.

victors, and the more troublesome and contumacious the vanquished, the more certain is this uncharitable view to find expression ; and if in addition to a superior civilization the conquered people boast also a different religion, no further justification is called for. The true Chinaman still regards the white races collectively as so many "foreign devils," and the attitude of our Teutonic forefathers towards the Britons whom they dispossessed was much the same. This helps to explain why the sites of Roman settlements in England were left mostly unoccupied, avoided as the works or the haunts of evil spirits, to crumble slowly back to dust, until a new religion bred a broader intelligence, and that wisdom which had guided the Roman in the choice of his sites was in many cases endorsed by renewed occupation. Outside the walls of Roman towns and villas there was little or no brick and mortar to arouse the wakeful superstition of the invaders ; but the sites of the humbler Romano-British settlements, with their huts of wattle or straw, were none the less avoided, so much so that it is likely that the Saxons did not go out of their way to hunt out the refugees of the conquered race. There was, save over very limited areas, no war of extermination against them. They were left very much to themselves in the swamps and the forests surrounding the Saxons' clearings, and outside the "mark" the Teutonic tribes were accustomed to believe that witchcraft and devilry had things their own way. That the Britons when at bay were an extremely dangerous foe was but an additional reason for leaving them alone ; and if any excuse were needed, it was at once convenient and conclusive to dub them devils. Delightful reading is the monkish tale of the trials of Saint Guthlac, when, in 700 A.D.—two and a half centuries after the reputed first coming of Hengist and Horsa—he essayed to find him a hermitage in the Fens, which then, as later in the days of Hereward the Wake, were the sanctuary of a race which

refused to be conquered. The meditations of the Saint were sorely disturbed by undesirable visitors, "truculent of countenance and frightful of shape," beetle-browed and blubber-lipped, with hideous jaws that bristled with teeth like those of horses, and vomited flame—creatures who, on one occasion at least, "spoke with the speech of Britons." Saint Guthlac, says the tale, was in fact convinced that they were indeed Britons, and was vastly relieved to learn in the end that they were not so, "*but only devils.*" Could the old Chronicler possibly have paid a higher tribute to the formidable qualities of the refugees around Crowland, "the muddy land"? And if we are to believe that his picture gives a fairly accurate notion of the Saxons' appreciation of British physiognomy and physique, is it any marvel that they placed devils and Britons in one category? And seeing by rare chance such creatures creep, like Mr. H. G. Wells' Morlocks, out of some old flint-diggings, or out of the half-subterranean pits which served them for dwellings within the ceinture of some seemingly deserted camp, were they not justified in naming the one spot Grime's Graves, as in Norfolk, the other Grim's Pound or Grimsbury or some similar name?

But if the explanation here suggested were at fault—and after all, the things which Saint Guthlac saw may have been but visions bred, as has been imagined, of poor diet and the ague—there is another quite sufficient explanation to be found in the vast size of many of the ancient dykes. The Cambridgeshire Devil's Dyke, albeit not by any means the longest of such works, is nevertheless of such proportions that it might well be put down to nothing less than Satan's handiwork. Commencing at Stetchworth it runs for seven miles in an almost direct line from south-east to north-west across the open stretches of Newmarket Heath to the forlorn hamlet of Reach upon the Cam. Its measurements, as given by different authorities, vary considerably: Sir H. Dryden made the height of the bank

above the level of the soil to be 18 feet with a width of 12 feet at the top. The eastern slope he put at 30 feet, the western, from crest of vallum to bottom of fosse, at 46 feet, and the width of the fosse at 20 feet. Another authority declares that, a little south of the point where it was crossed by the Cambridge-Newmarket road, he found the dyke to be 18 feet wide at the top, the western slope to have a slope of 70° , and the measurement along that slope from top to bottom to be as much as 90 feet ! The present writer's own opinion is that Sir H. Dryden's figures are far too small : as no particular point is mentioned, they perhaps represent average measurements only. In matters of this sort, however, the smaller figures are usually to be preferred, and when one endeavours to realize what even these smaller figures mean, one's respect for the builders, whoever they may have been, rises to proper proportions. Sir H. Dryden's figures give to the dyke a slope of 45° or so. Now if the cubic content of a bank of the same slope, 1 foot in length and 1 foot high, be represented by unity, as the mathematicians would say, then the cubic content *per* foot of any similar bank will be represented by the square of the altitude in feet. Thus a bank 2 feet high has four times the content, a bank 5 feet high has 25 times the content, of a one-foot bank. Estimated in this way and with due allowance for the fact that its top is flat, the Devil's Dyke represents a bulk, *per* foot of its 7 miles of length, at least *five hundred and forty times as great* ! And this enormous wall is throughout the work of man's hands, nowhere aided by any natural features of the ground. Nor do these figures give an adequate idea of the labour involved, for no account has been taken of the fosse, nor any allowance made for the shrinkage of fosse and vallum under centuries of denudation. There seems to be little doubt that the Romans found this particular ditch here when they arrived, and it bears no sign of having ever been strengthened or repaired. It must therefore have

suffered from the wastage of nearly 2,000 years, if from no more deliberate damage. Yet there it lies, or rather stands, immense and clean-cut as if it were a work of yesterday. The tenacious chalk of which it is built has kept its shape and slope better than a looser soil could have done, and the crisp turf has covered it over as with a close-fitting garment of green, splashed in summer-time with patches of yellow king-cup and sparsely flecked with purple scabious. Only when you try to scale the steep bank do you realize how formidable a defence it was and is. Wet or dry, its smooth steep slope is as slippery as ice, so that you are fain to go up on all fours, if at all, and begin to admire as it deserves the exploit of that worthy who for a wager, a hundred years ago, drove four-in-hand over vallum and fosse alike. There are three great makers of history whose names have left upon the map a larger mark than the rest, *videlicet* Cæsar and Cromwell and the Devil. Cæsar's *métier*, rightly enough, is that of the warrior only, eponym of a score of mighty camps, with no one of which had he in all likelihood anything to do. Cromwell incarnates the forces of destruction ; he is the spoiler of churches and of castles, Iconoclastes and Poliorcetes rolled into one. But the great builder, the constructive engineer, the arch-thaumaturge of English tradition, is the Devil.

Until recent times the boundary of the see of Norwich, before that the limit of the halidome of the Blessed Saint Edmund of Bury, earlier still the "mark" which divided the Saxon kingdoms of East Anglia and Mercia, the actual origin of the Devil's Dyke is still a mystery. Nor is it alone of its kind in the locality : it is but one, if the greatest, of no less than five similar earthworks which lie parallel one to another in Cambridgeshire across the narrow belt of chalk along which, as along a causeway, westward from the lands of the Iceni in Norfolk and Suffolk ran the great Icknield Way by Royston and Dunstable and Tring to the Thames at Wallingford. In

all five instances the fosse lies on the western side,¹ proof positive that the dykes were built by a people whose territories lay to the east; and if the Bran Ditch by Heydon and the Brent Ditch by Pampisford—the name in each case means “steep”—were perhaps relatively never very imposing works, the third—the Woolstreet—long accounted a Roman road, is formidable still, while the fourth, the Fleam Dyke or Balsham Dyke, scarcely inferior in height and solidity to the Devil’s Dyke itself, actually surpasses it in total length. The purpose of all five is obvious, whatever doubts may beset the problem of their date. Far into the Middle Ages the country to the south of these barriers was dense forest, as that to the north was impassable fen. At the southern end of the Devil’s Dyke lies the village of Wood Ditton—the Dyke-town in the Woods—and the northern termination of the Fleam Dyke is marked by a Fen Ditton—the Dyke-town in the Fens; and the memory of a long vanished forest is preserved also in the name of Saffron Walden—the settlement in the weald, or forest, which later became a centre of the cultivation of saffron. The forest has shrunk back to Epping, the fens almost as far on the other side, so that to-day the dykes seem to end “in the air,” to lack purpose; but it is certain that they were built, whoever the builders, to bar the one and only overland approach to territories to the east. The builders must have been a powerful and a populous people, if they are to be judged by their works, a people with equal wit

¹ This statement is not altogether free from doubt in regard to the Brent Ditch. Babington cites Hartshorne as saying that “the vallum was on the same side as that of the other dykes,” viz. on the east; but says that he himself saw (1853) “a low but well-marked bank on its western side, and no trace of one on the eastern side.” In very many instances the soil seems to have been thrown out indifferently on either hand, so that it may be difficult at any one spot to determine which way the ditch was meant to face; and where ploughing has interfered with the works, as in this case, the total disappearance of one or other bank may make the difficulty very puzzling.

and will to turn to their advantage the physical features of the land as then it was.

Upon philological grounds Professor Skeat¹ was led to believe that the name of Fleam Dyke means the Flemings Dyke, and strange to say, he found lingering amongst the peasantry of the locality the tradition that the dyke was indeed built by the Flemings. Such a tradition may have arisen merely from the fact that the people so called in the Middle Ages had a great reputation for constructing enormous sea-dykes. Dante declares that the embankment of the River of Hell's Seventh Circle was not so high nor so broad

"as the Flemings rear

Their mound 'twixt Ghent and Bruges, to chase back
The ocean."²

On the other hand, it may quite conceivably go back to a far more remote date and even to the historical fact that these particular dykes of Cambridgeshire were constructed by invaders coming from the shores of the Lacus Flevo (Zuyder Zee) and the lands now occupied by the Flemings. The existence of similar works in that part of the Continent would seem to support this view. One such is the great Dannewerk which cuts off old Jutland from the mainland, and which as late as 1863, in the war of Austria and Prussia against Schleswig, once more served perhaps the very purpose for which it was first constructed long ages previously.³ Familiar as the Romans were with such a method of defence, it has not yet been shown that the native Britons ever employed it, although the cases of the Wansdyke and Bokerley Dyke show that the Romanized

¹ *Place Names of Cambridgeshire*, p 40 (*Publications of the Cambridge Antiquarian Society*, No. xxxvi., 1901).

² *Inferno*, Canto xv. (Cary's Translation).

³ Nothing whatever is known of its date. Greenwell and Rolleston (*British Barrows*, p. 124) think it was probably "constructed at a time antecedent to the Scandinavian occupation of Denmark." There are several other works of a similar kind in the same region, the old Angle-land.

Britons imitated the Roman example, and the case of Offa's Dyke proves the same of the later Saxons. The ditches of Cambridgeshire are certainly not Roman; there is no analogy for supposing them Celtic; there is some analogy to justify their attribution to one or other of the Baltic tribes, some of whom were perhaps included by Cæsar under the name of Belgæ. Beyond this we at present know nothing. One theory boldly asserts that they were constructed by those tribes who first introduced iron into Britain. It seems almost certain that works such as the Devil's Dyke and the Fleam Dyke at any rate can never have been built merely as boundary-marks, but must have been strictly military works for the protection of the land in their rear from the assaults of enemies towards the west; and though the matter is still in debate they may very well represent the work of some of the earliest of the Baltic immigrants, who, as is now believed, began to make settlements on the east coast of Britain even before the advent of the Romans. That the dykes are of an age prior to the Roman road which they cross is almost certain,¹ and that they were here in very early Saxon times is incontestable.²

The so-called Buckinghamshire Grim's Dyke is traceable with a total length of upwards of 16 miles from Ashridge Park, on the western borders of Hertfordshire, to Bradenham, 4 miles north-west of High Wycombe, albeit in many places now destroyed. It is first recognizable on Berkhamstead Common, heading west by south for the valley of the Bulbourne River, and reappears again on Wigginton Common, still maintaining the same direction as far as St. Leonard's, where it turns more to the south,

¹ Professor Ridgway believes them to be alluded to in Tacitus' description of the great defeat of Boadicea, 61 A.D. See *Proceedings of the Cambridge Antiq. Soc.*, No. xxxiii.

² There is a Hundred of Flendish in Cambridgeshire, and *Flendish* is the same word as *Fleamditch* (W. W. Skeat, *op. cit.*).

as far as Cock's Hill. From this point it ran due south to King's Ash, where it is entirely lost for more than a mile, but is again found near Lee running south-west down the hill to the Wendover-Missenden highroad along the edge of Woodlands Park. Lost again for another mile, it is next found near Great Hampden running west by north across the park to a point $\frac{3}{4}$ mile beyond Hampden House, where it turns left with an exact right-angle and so direct for 2 miles to Lacey Green. Thence, bearing a little more to the left, it is traceable for 2 miles more to the vicinity of Bradenham.¹

Throughout its course it shows a single vallum and a single ditch, and though in reality a work of very considerable magnitude, it nowhere presents a very striking appearance.² It is best seen in the neighbourhood of Hampden Park and Redland End, where it is littered with flint chips in some quantity, and it is very conspicuous also on Berkhamstead and Wigginton Commons. For much of its course over the higher ground it maintains a fairly uniform distance from the brows of the hills, but it appears to have no relation to any of the many camps in its vicinity, and does not approach within a mile of any one of them. At neither end is there any obvious explanation for its terminating

¹ It is said to be the unshakable conviction of the peasantry that the dyke originally ran *right round the world*, alike under seas and over continents! Some of them, it is needless to say, attribute its construction to Cromwell.

² Where best preserved the over-all measure of vallum and fosse together is between 50 and 60 feet, and the crest of the vallum above the floor of the fosse is from 5 to 6 feet. The fosse, where still discoverable, is on the southern side. Between Redland End and Lacey Green there remains only the fosse, and little of that; and in many parts almost the sole token of it is the ancient field-path along its course. The fosse of the Middlesex Grim's Dyke, still very noticeable between Oxhey Lane and Harrow Weald Common, is also on the southern side. This single fact at once disposes of the theory which would attribute the Buckinghamshire Dyke to the Romans, supposing that it was constructed to guard the earliest Roman conquests in the south-east of the island.

where it does, and its general course does not tally with any known facts relating to the disposition of Saxon kingdoms or British tribes. One solitary feature which might help to throw light upon the problem of its age is that the two great barrows in Oaken Grove, $\frac{1}{2}$ mile south-east of Hampden House, stand actually upon the line of the bank, which has here been partially removed, possibly to provide the material for building the mounds in question. This would of course imply that the dyke is older than the mounds, but it does not determine their date in any way. Excavation has thus far failed to discover any traces of interments within them, and one at least of the two is so large as to have provoked the theory that it may represent a defensive work of Norman type.¹ If this were so, then the construction of the dyke might belong to a very late date in Saxon times.

A possible explanation for the termination of the dyke eastward at Ashridge might be found in the indisputable fact that the country thence onward towards St. Albans was once dense forest. This is to be inferred from the mere fact that the great *oppidum* subsequently known as Verulamium stood where it did, and it is in a measure confirmed by the further fact that a second similar work—the Middlesex Grim's Ditch—which is crossed by the London and North Western Railway north of Pinner station,

¹ The radius of this mound is 60 feet, its height about 16 feet, the diameter of the summit over 40 feet. Its sides are very steep, but otherwise it has every appearance of a typical "bell" barrow. The original vallum of the dyke appears never to have been removed, and remains to break the circle of the fosse on either side. Exactly the same feature is observable in the smaller mound, 50 yards to the west. The dyke and fosse have completely disappeared east of the larger mound; they reappear immediately west of the other, which has a radius of 50 feet and a height of 12 feet. The fosse in neither case has a parapet, nor are there traceable any of the usual subsidiary works which accompany the Norman motte. Half a mile due west of these and $\frac{1}{4}$ mile south of Hampden Church is a third mound, locally known as the Dane's Camp, almost identical in size with the larger of the other two, and, although this lies $\frac{1}{4}$ mile from the line of the dyke, its fosse has exactly the same bridges as the others, and at precisely the same compass-points (W.N.W. and E.S.E.).

running eastward up to Harrow Weald Common, likewise ends "in the air." But inconsistent with this theory seems to be the utter disregard for forest lands shown by the course of the ditch westward across the Chilterns. Far into the Middle Ages the dense beech forests of the Chilterns were still a well-known resort for lawless characters of all kinds, and there is nothing to suggest that the country was not quite as thickly wooded in earlier times.¹ On the contrary, the course taken by the Icknield Way, which carefully avoids the upper levels and skirts the slopes where the forest presumably ended, although this adds considerably to its length, would seem to prove that the forest was ancient.

If projected, this dyke would pass by West Wycombe and Fingest to the elbow made by the Thames at Henley. From Henley another Grim's Ditch runs west-north-west roughly parallel with the Henley-Oxford Road, passing up the valley by Bix, across the brow of the hill overlooking Nettlebed Wood north of Highmoor Common, and after an interruption of $1\frac{3}{4}$ miles reappears at Nuffield and continues in a perfectly straight line for $3\frac{3}{4}$ miles to the Thames at Mongewell. Just at the middle point of this section it crosses the Icknield Way by the side of Foxberry Wood. For most of its course it is just such another single work as the Buckinghamshire dyke, the fosse facing to the south; but on Highmoor Common, where it is known as Highmoor Trench, it has the appearance of two parallel banks of slight relief, 30 feet apart, with a slight fosse on the southern side of each bank. Like its Buckinghamshire neighbour, it seems to have no connexion with any other earthworks. Its total length was 10 miles. In the north

¹ The manor of Flamstead was held of the Abbots of St. Albans by the service of policing part of this woodland westward to the Forest of Bernwood, bordering on Oxfordshire. Bernwood was disforested by James I., in whose time the author of *Polyolbion* (1613) could say that "here if you beat a bush 'tis odds you start a thief."

of the county are two other ditches of insignificant size, viz. a Grim's Dyke which, making a curve of 3 miles between Wootton and Charlbury, rests at either end upon the rivers Glyme and Evenlode; and that called Aves Ditch, eastward of the Cherwell, which runs from Middleton Stony south-west to the Akeman Street near Kirtlington.

Very little can be made of such small and fragmentary works as those last named. Lying for the most part at low levels,¹ and often upon land which one must suppose was long since deforested and has lain for ages under continuous cultivation, they have suffered grievously, and their *disjecta membra* are mostly too small and scattered to allow of any sure reconstruction of their original course. Yet the proportions of these remnants are not seldom such as to show that originally the works were as striking as are the greatest that survive. Near Wealdstone Common, Middlesex, is a fragment of a Grim's Dyke which, despite Time and the plough, still has a vallum 12 feet high and a span of 60 feet over all, its fosse facing to the south. Many of the shorter dykes must be analogous to those at Lexden, Essex, having been constructed to shut off conveniently defensible areas between forests, swamps, or rivers; and of those of less dignity some at least, and especially those found in conjunction with camps larger or smaller, are presumably the remains of primitive cattle-fences.

Like other such terms, that of dyke or ditch is occasionally misapplied. Achling (or Ackling) Ditch, in Dorsetshire, is a good example of its erroneous use. In speaking of Bokerley Dyke² mention was made of a

¹ It has been remarked of the Bucks Grim's Dyke that it would seem never to have been so formidable a work on the lower and more open ground as upon the higher and more wooded levels. Yet if it had been designed for defence, one would expect the reverse to be the case. This, however, is the explanation of its complete effacement wherever it leaves the hills.

² See p. 374.

Roman road which passes beneath the dyke near Woodyates, running in a straight line to the south-west. For some two miles beyond the dyke it is embodied in the modern high road, but here there is a fork: the high-road takes its own course towards Blandford, while the older Roman road is continued direct across country for 4 miles as a broad grass-grown *agger*, fully 15 feet wide at the top, and rising in places as much as 6 feet above the natural surface, with here and there traces of a fosse on either side. This is the bank to which the name of Achling Ditch attaches, and it was long regarded as a work of the same class as Wansdyke and Bokerley Dyke. As a matter of fact it is simply the *agger* or rampart¹ of the Roman road, and its disproportionate breadth, its level summit, and most of all the presence of the ditch *on either side*, ought to have prevented any mistake as to its real character. The extraordinary trouble taken by the Romans, often without apparent reason, to raise their roads upon such *aggeres*,² had led to similar confusion in other cases; indeed, when agriculture has interfered and destroyed the side-fosses, there is sometimes considerable excuse for those who have maintained that the

¹ In many parts of the country, *e.g.* in Nottinghamshire, any raised road is locally styled a "ramper," and the term is occasionally extended to any high road, whether raised or not, and without regard to its date.

² There is a fine, but by no means unique, example in the Roman road which led from Danum (Doncaster) to Calcaria (Tadcaster). Near Hampole "the ridge is very perfect, 15 feet wide and 6 or 8 feet high, the slopes overgrown with bushes . . . so high above the fields that cart-ways slant obliquely up the side-slopes, which are so steep that they must be built up with stone." T. Codrington, *Roman Roads in Britain*, p. 155. In low-lying country the straight, green roadways which serve as accommodation roads not seldom show a raised surface, due (in part at least) to constant reparation during long terms of years. In Cambridgeshire and Lincolnshire these ways are known as "droves," in Essex as "mannaways"; and in Lincolnshire "manna" and "muck" are synonyms, and either would serve to describe the condition of such marsh-lanes for the greater part of the year. In localities where peat-digging is practised, *e.g.* in Somersetshire, it is usual to leave narrow roadways between the turbaries for cartage, but these rapidly sink down to a uniform level in the spongy subsoil.

Roman had here and there availed himself of pre-existing dykes, and laid his road along their crests. That this may have occurred occasionally is quite likely, and in later times it was not an uncommon way of utilizing such works. There is an instance in the entrenchment known as Wool Street, Cambridgeshire, of which the original purpose—a defensive dyke of exactly the same character as the Devil's Dyke and the Fleam Dyke, to which it lies parallel—was only discovered a year or two ago. It had so long served as a roadway that all knowledge of its having ever been anything but a road was lost; and partly because of its directness, partly because of its name of a "street," it was with little hesitation dubbed a Roman road. There seems to be evidence that it was already thus used in Roman times, as were others of the dykes in the locality, but there is no evidence that it was ever paved.¹ Another instance is to be seen at Lexden, Colchester, where part of the vallum of the original British *oppidum* has been utilized as a roadway, perhaps from Roman times. At the present day it is known indifferently as the Rampart and the Roman Way. The reverse case, in which the *agger* intended for a roadway has been utilized either as a defensive work or as a boundary mark, is commoner; indeed, the course of Roman roads now vanished is often

¹ An *agger* of genuine Roman construction and intended to serve as a road will as a rule reveal its true character to very slight excavation. The Roman almost invariably used more or less gravel in his road-building, if not other material still more tell-tale; and his *agger* was commonly provided with a slight fosse on either side, whereas a defensive dyke is fossed on one side only. A cross trench, if carried deep enough, will usually disclose one or both fosses. Defensive dykes were in their original shape mostly too narrow at the top to serve as roadways for vehicles, but they were easily levelled to the required width. But the traffic of bygone times was chiefly by pack-horse, and it commonly went along the fosse, if that were dry enough, so giving rise to those rights of way which frequently are at the present day the sole sign of the course of the ancient work. This explains such names as, e.g., Sixon's Loaning applied to dykes.

to be recovered by the rectilineal course of parish boundaries, once more visibly marked by the *agger*.¹ T. Codrington mentions several instances in Yorkshire² of Roman causeways marked upon the Ordnance Map as "intrenchments," exactly as has happened in the case of Achling Ditch.

"Such walls," says Canon Rawlinson, "are always a sign of weakness"; and Pitt-Rivers observes that they are usually "the work of a higher civilization struggling against a lower." There is no contradiction between the two statements, which, so far as we know anything at all of the English dykes, are illustrated thereby. The Romans took to building dykes—in Britain, between the Rhine and Danube, and along the lower course of the Danube—only when they were no longer able to take the offensive at all or any point of their vast frontiers. Their civilization was on the defensive at every point, destined very shortly to be overborne and submerged by the rising tribe of barbarism, Pictish, Frankish, Gothic, or what not.³ It is perhaps scarcely justifiable to treat either assertion as the premiss for further inferences, but it is permissible to point out that, excluding those known to be of Roman date and those which are believed to be the work of the Romanized Britons, none of the finer and more elaborate English dykes contradicts the fact that the

¹ The name of Mereway, or Mareway (from the Anglo-Saxon *maere*, a "mark," a "boundary"), points to a similar fact: the *aggeres* of some roads served at once as roads and as boundaries, precisely as some dykes seem to have done.

² *Roman Roads*, ch. iv. As a general rule the Roman road was so direct that this alone distinguishes it from other dykes, however much mutilated. Genuinely old dykes are commonly marked by curious deflections and angles, for which there is often, at the present time, no reason apparent. In some cases it seems as if the work had been ditched now on one side, now on the other, but this is probably the result of agricultural operations. The Buckinghamshire Grim's Dyke exemplifies both these characteristics.

³ "The Wall is to me," said Bishop Creighton, "more interesting for the impression which it gives of the power of the Britons, than of the mightiness of Rome."

civilization of the island has moved always from east to west. The Cambridgeshire dykes were apparently the work of invaders coming from the east; so possibly was the Danes' Dyke at Flamborough; and even Offa's Dyke and Watt's Dyke in the west of the island are no exception, for even if they were really constructed in Offa's time it was as a bulwark against a Celtic remnant, now completely barbarized by upwards of four centuries of defeat without and dissension within, a hunted race, in no point save their courage to be compared with the now settled, Christianized, and rapidly progressive Saxonry of Mercia.

Quite different in purpose, and probably in date also, are the dykes constructed to serve as sea-walls or for embanking rivers. The Romans certainly did a good deal in this direction: there are Roman flood-banks along the Granta below Cambridge, and the names of the villages near the mouth of the Wash—*Walpole*, *Walsoken*, &c.—prove that there were sea-dykes there before the Saxon conquest. The fortress of Othona, one of those built to guard the *Litus Saxonicum*, is now under the sea, but the modern hamlet of Bradwell—the Broad Wall—preserves the memory of the Romans' sea-wall adjacent. In such cases the original work is of course invisible: it has long since been buried under later work, for such walls require constant reparation and raising. Mr. A. C. J. Spurrell¹ has discussed the date of the various embankings of the lower Thames, and concludes that there is nothing here which can be safely attributed to Roman days. "Of banks against the tide in the district below Purfleet there are none surviving of the Roman

¹ In the *Archæolog. Journal*, xlii. (1885). He traverses the usual belief that in Roman times the Thames near London spread out into a wide morass or lagoon. Messrs. Norman and Reader (*Archæologia*, lx., p. 179) take the same view, declaring that the site of Roman London was "both healthy and agreeable."

Period, while above that place none, or but the slightest ones, were needed, and no signs of any can be found. Some Saxon banks perhaps exist below Gravesend, but cannot be precisely identified at present ; while above it, with the exception of Littlebrook Walls, there are none now known older than the thirteenth century." Such flood-banks, usually of small size, are to be found in many districts which have long ceased to require them. They belong to a date when drainage and desiccation had not gone so far as now they have. In such localities it is not uncommon to find the farmsteads enclosed within similar banks, the regularity of which bespeaks them to be of no great antiquity. But even as little as a century ago many parts of the country which now never see a flood were under water more or less every winter.

About the lower courses of the Trent and the Yorkshire Ouse it is still the practice to build dykes with the express purpose not of keeping the water out, but of letting it in ; for these rivers bring down quantities of silt—"warp" is the local term—which makes the very best of corn-land, and it is customary, when the soil shows signs of impoverishment, to embank a large area, cut a channel to the river, and lay the land under water, possibly for several years in succession, until there has been deposited a sufficient depth of fresh soil. When the land is once more drained and enclosed, the dykes are commonly retained and used as cart-ways, in their directness and relief precisely resembling the *aggeres* of many Roman roads.

It is not always easy to say whether, or to what extent, a dyke is natural or artificial. At Kirklington, near Bedale, is a well-known instance, an immense and very irregular dyke extending for some two miles or more in a very erratic course mainly from north to south.¹ Com-

¹ It is locally known as the Yammergarth Hills, a name said to be derived from that of Gernan, or Yarnan, who held the lands *temp.* Edward the Confessor,

posed entirely of sandy gravel, it has been in places removed wholly or in part, but where it remains intact it has the appearance of an artificial work of tremendous thickness, with a vertical height of from 30 to 40 feet, its summit in places over 40 feet broad. There can be no reasonable doubt that this was originally a natural formation,¹ curious though it be; but that it has been artificially improved in places is obvious, and at one spot, about $\frac{1}{2}$ mile north of Kirklington Church, an unmistakable ringwork occupies the entire width of the top of the ridge. It has fosse and vallum complete, although of slight relief, and measures 42 feet over. Huge as are many of the earthworks of early times, the Yammergarth Hills are too vast in scale not to raise doubts as to their origin, and the extraordinary manner in which their line conforms to the contours of the ground goes likewise to suggest nature's agency only. Nor are there discoverable any pits or fosses, such as must have been formed had the hills been built up of material brought hither from some other place.²

In some localities the work of the quarryman or the miner produces effects which may easily mislead the antiquary who is not also something of a geologist. It may happen that the particular material to be "won" follows a perfectly regular line or "strike," at a uniform level, so that in winning it the workman accidentally

¹ It is one of those natural drifts of gravel known to geologists as "eskers," or "esker ridges," often extremely like artificial works.

² Another "esker," about 1 mile south of Kirklington, and part of the same geological formation, is an extreme instance of the closeness with which the natural may mimic the artificial. It is an entirely natural mound, but its resemblance to a *motte* is heightened by the presence of two processes westward, which suggest the walls of a base-court, while the reappearance of the gravel ridge 90 yards further to the west forms, as it were, an outer vallum to the whole. The only artificial traces discoverable, however, are those of some slight terracing of the summit of the mound, which has evidently once been occupied (as its name of "Berryhills" would suggest), though when or why is unknown.

opens a level and regular trench, which speedily weathers to the exact appearance of an ancient fosse. The risk of error is heightened when, as not seldom happens, he screens his material on the spot, and casts aside the refuse along the line of his trenching, thus inadvertently throwing up what seems to the incautious eye a purposed vallum following the fosse. There are not a few so-called camps and dykes in the country which have been thus made within a generation or so.

As a final word of warning to the beginner may be mentioned the case of an enthusiast who "discovered," measured, and mapped a striking series of entrenchments in a western county, thus passing pleasantly enough a whole month of summer holiday. Only when he had finished his labours and was already putting the results into a paper which he hoped would provoke a sensation amongst archæologists, did it happen that he got into conversation with an old woman of the locality, who rudely shattered his dream with the remark that "them trenches was made by them Volunteers" a year or so before! The antiquary had overlooked a very important source of possible information. Local knowledge is frequently hazy, often wholly wrong, but it is always wise to hear its testimony.

CHAPTER XVI

MISCELLANEOUS EARTHWORKS

*"The hopes, ambitions, pomp and pride
Of a thousand kings that were,
And a thousand thousand hearts beside,
They are sport of the idle air.
The shepherd spurns them underheel,
The wild things turn them over,
And droning bees make moan for them
Among the heath and clover."*

ALTHOUGH the immediate subject of this book is defensive earthworks, the character of the subject makes it necessary to mention briefly many forms of earthwork not of that class. Besides camps, castles, dykes, mottes, and moats, there are a number of miscellaneous works of which something must be said, if only to suggest how much there is to be said.

The commonest of all forms of earthwork are barrows. Their study is a special branch of archæology, with a copious literature of its own, and we are concerned here only with their external appearance. Allusion has been made to the differences of race and date which are believed to correspond with the differences of shape in barrows long and round. As would be expected, long barrows are very much less numerous than round ones, and their distribution is very limited.

In Wiltshire and Gloucestershire they are numerous, in Dorsetshire fairly so; but it is curious that the still more

remote counties of Somerset and Cornwall have very few to show. In most of the counties they are not found at all. Although their measurements vary widely, long barrows are always unmistakably intended to be long. Their length may be anything from 40 to 60 yards, their elevation as much as 10 feet, they are almost always placed east and west, and the eastern end is commonly higher and broader than the other. They are sometimes ditched at the sides, but rarely all round. Some examples show a rude containing wall, dry-built, of no great height, with or without a series of upright stones—a “peristalith”—arranged at intervals along the periphery. Partial removal of the materials has occasionally reduced the mound to the seeming of a round barrow; in one example near Cirencester the central portion has been carted away, leaving the two ends standing like “twin” barrows of the commoner type.

Isolated, in pairs, in groups—seven, eight, and nine are favourite numbers—or scattered thickly over wide areas of ground, round barrows are as common as long barrows are scarce. About Stonehenge they are counted by hundreds, as also in western Dorsetshire; and save where agriculture has destroyed their every trace there are few elevations which do not show one or two. They cover indifferently the bones or the ashes of Celt and Roman and Saxon and Dane.¹ With many exceptions to the general rule the Celt preferred to build his barrow upon the highest levels accessible, the Saxon affected a situation

¹ The presence of a barrow is a sign of *heathen* burial, which persisted amongst one or other of the Saxon tribes until the eighth century, when the Church commanded that the dead should be buried in churchyards. Danish barrows may, of course, date much later—even into the tenth century. It need scarcely be said that, for every corpse buried under a barrow, there were hundreds buried without that grave-mark, and that of the barrows that were built there survive but the most infinitesimal fraction. Most of them would from the first be too insignificant to withstand the denudation of many centuries. It is reasonable to believe that the size of the barrow reflects the dignity of the person or persons buried beneath it.

overlooking the village in which he had lived, and Roman barrows are commonly at lower levels. While all show a ground-plan approximating closely to a perfect circle, they show, besides other less marked external variations, three principal forms, known respectively as the Bowl, the Bell, and the Disc (or Ring).¹

The Bowl barrow is so called simply because it resembles an exaggerated mud-pie. Most of them are not so much mounds as mere swellings in the ground, a few inches only above the general level, and in diameter anything from 5 or 6 feet to 100 feet or more. Others rise to 10, 20, even 30 feet or more. There is, indeed, no known limit of size. Silbury² Hill, Wiltshire, is believed to be one of them, although repeated efforts have thus far failed to discover its

¹ Not by any means every hill or hillock to which the name "barrow" attaches is a burial-mound, or even artificial; *e.g.* Creech Barrow, near Corfe, and many "eskers," or gravel-mounds in Cumberland, Yorks, &c. The name attaches even to camps, *e.g.* Thunderbarrow, near Kingston-on-Sea, Sussex, and Elworthy Barrows, Somerset. Very many so-called tumuli were never sepulchral. There is, for example, a round mound outside the Roman station of Wendlebury, Bicester, Oxfordshire, which merely hides the remains of some Roman building. Others, as has been said, are the remnants of Norman *mottes*. On the other hand, the ancient peoples did not invariably go to the trouble of making a barrow; they occasionally used an "esker," or other natural mound, for a burial-place.

² The first syllable may be the A.-S. *sel*, "noble." Popular etymology declares it to be the burial-place of one King Seal, as Pepys has recorded. "Bury" is, of course, the same word as "barrow." A common substitute is *how* (*howe*) or *low* (*law*), both meaning "hill"; *e.g.* Hubba's Low, Quernhow. In Cheshire the word "cob" has the same meaning. Many of the more conspicuous, from long use as landmarks, have acquired individual names (*e.g.* Leather Barrow, The Butts, The Dial, Money Hill), or have even given names to the adjacent villages. Popular etymology is fond of accounting for them. In the North Riding, near Kirklington, is a barrow of the Bronze Age known as Staple (*i.e.* Steeple) Hill, doubtless originally in allusion to its unusual steepness and height. But the village folk will have it that the mound was reared over the body of an imaginary General Stapleton "killed in the Civil Wars"; and they account for its unusual height by declaring that the general, an exceptionally tall man, was buried standing upright! It is curious that the peasant of this generation is still alive to the very same feature which caused his forbears of long ago to dub the hill "Steeple."

secret. It rises to a height of 170 feet, has a diameter of 104 feet at the top and 552 feet at the base, is more than 550 yards in circumference, and covers an area of five acres. It has been proved to have been in existence before the construction of the Roman road which passes along its base. Like some of the long barrows, it originally had a peristalith,¹ and either this, or a low retaining wall of dry stone, is a common feature in barrows which at once differentiates them from mounds of any other origin. If Silbury be indeed wholly artificial, it has few or no rivals. The great tumulus on which stands the church of St. Michel at Carnac is but 65 feet in height.

With the addition of a ditch more or less well marked about the base of the mound, the "bowl" passes into the "bell" barrow. The ditch is usually interrupted at one point, as it were by an entrance, and not seldom shows a depressed parapet on the outer edge.² The

¹ Similar rings of upright stones, not of any great size, are occasionally found embodied within the earthen mound. Analogous are the small circles of stones, without visible trace of any mound, which have occasionally been found to surround interments. In these cases the mound may have been removed, or some chance may have prevented its ever being raised, or there may never have been any intention of raising one. There have been fashions in graves and monuments since the beginning of things.

² In an article in *Proc. Lancs. and Cheshire Antiq. Soc.*, vol. xviii. (1900), dealing with the anomalous oaken circle of Bleasdale, near Garstang, Prof. Boyd Dawkins instances a tumulus of the Bronze Age at Whatcombe near Blandford, explored 1898, where "the bottom of the ditch, cut in the chalk, was smoothed and polished into a perfectly well-defined track by human feet circling round the burial mound." This ditch was originally 5 feet deep. In the case of the Bleasdale Circle there was a closely-set stockade of logs, with a diameter of 150 feet. Inside this, and disposed as near as might be to its eastern side, was a second work consisting of a low circular bank (diameter 75 feet), within which was a ditch, and within this again a "peristalith" of eleven oaken posts. At its actual centre was a slight mound covering interments of the Bronze Age. The ditch, 5 feet in depth with a funnel-shaped section widening to 4 feet at the surface, had been carefully floored with poles laid side by side along the line of the ditch, as if to form a sort of processional way. The entrance to the exterior stockade was by a narrow opening to the south-west; that to the inner circle was by a widely-splayed opening between the oaken posts, facing due east.

dimensions may vary as widely as those of bowl-barrows. "Bowls" and "bells" alike are sometimes uniformly convex at the top, sometimes show a larger or smaller depression at the centre.¹ On the South Downs it is said that the convex-barrows are mostly Celtic, the concave are Saxon. The latter are, as a rule, smaller than the former, but the local variations are endless.²

The characteristic of the third class, or "disc" barrows, is not the mound, which may or may not be there, but a simple ring-wall of earth or stone, or both, surrounding a circular area.³ This area is sometimes the natural surface of the ground; sometimes it is raised to a perfectly flat table, with or without a slight parapet of its own; sometimes it rises in the centre to a mound of large size; or again it contains two, three, or more distinct mounds of the "bowl" type. The materials for the ring-wall are usually obtained from a shallow fosse either within or without the wall, and occasionally there is a fosse on both sides. Upon the vallum sometimes stood a peristalith.⁴ In some cases there is a gap left as an

¹ This depression is doubtless in many cases merely the result of ill-advised experiments in tomb-robbing, but in others it is unmistakably part of the original design.

² In the North Riding, and elsewhere, are found barrows of square plan with rounded corners, surrounded by a trench (Greenwell and Rolleston, *British Barrows*, p. 370, note). Others, chiefly occurring in Westmorland, have as it were projecting rays, or horns, attached to the central mound ("star-fish barrows"), e.g., Shiel Knowe, near Bewcastle. These "rays" are, perhaps, merely later additions to the original mound, covering later burials.

³ Stukeley, with the irresponsibility which characterised the antiquaries of the eighteenth century, was satisfied to conjecture that disc-barrows marked the burial-places of Druids. Sir R. Colt Hoare challenged this opinion, with very little better reason, and preferred to believe them to be "appropriated to the female tribes," whatever that may mean (*Ancient Wilts*, vol. i., p. 21). Dr. Thurnam's Essay in *Archæologia*, xliii., still remains an authoritative statement of sounder conclusions as to barrows in general.

⁴ An example in Cumberland shows a circular peristalith of forty-one stones, diameter roughly 100 feet, surrounding five separate mounds, each of which has (or had) its own peristalith.

entrance to the ring, in others there is none. The "disc" is in most localities¹ decidedly rarer than the "bowl" or the "bell." Like those it varies widely in size: from

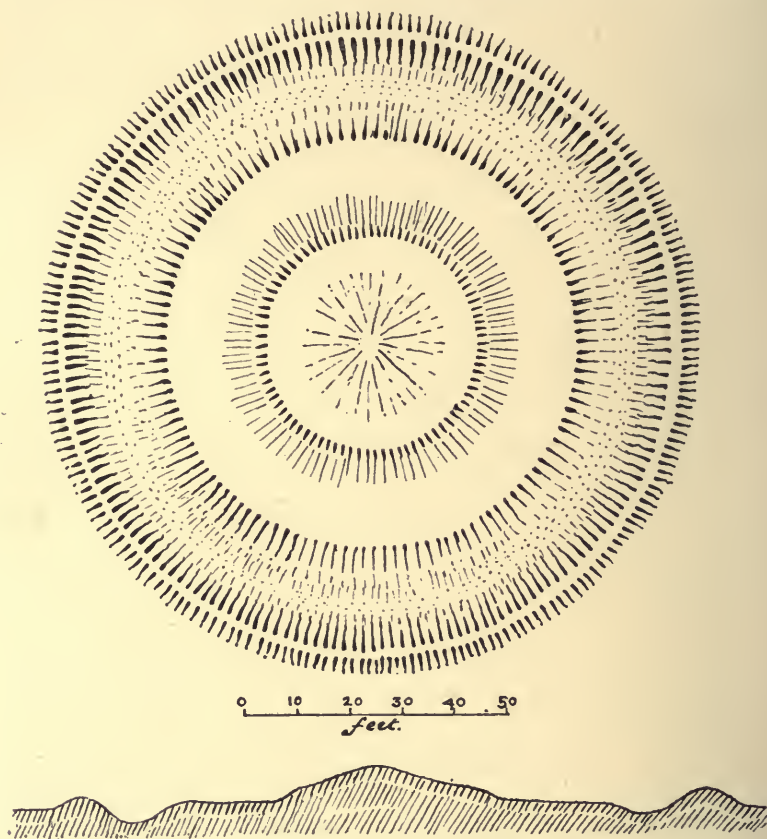


FIG. 177.—DISC-BARROW, HUNTER'S REST.

20 to 40 yards across is perhaps the usual range, but there are known examples much larger. Similarly the

¹ Prof. Boyd Dawkins says this type belongs chiefly to the southern counties. In Yorkshire it is rare. In a few instances there seem to be *two* concentric circles about the area. On Moor Divock, Askham, Westmorland, is "a circular space, 68 feet in diameter, enclosed within an earthen mound of very slight elevation, the entire area being paved with water-rolled stones. At the south-east side of it is a monolith called the Cop-stone, 5 feet high" (Greenwell and Rolleston, *British Barrows*, p. 400).

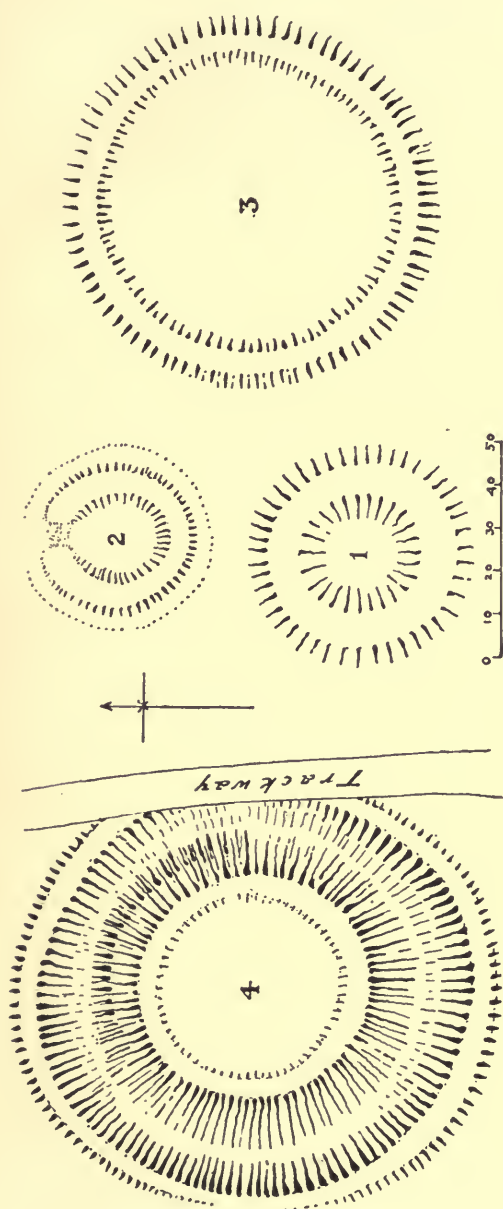


FIG. 178. —DISC-BARROWS, LEWES DOWN.

ring-wall varies from an unmistakable wall of 3 or 4 feet in height, down to the least discernible convexity of the soil, only perceptible in certain lights or from certain points of view. The barrow illustrated in Fig. 177, near the Hunter's Rest Inn upon the Mendips, is a fine example of its class. In Fig. 178 are shown various types of disc-barrows to be seen upon the South Downs near Lewes.

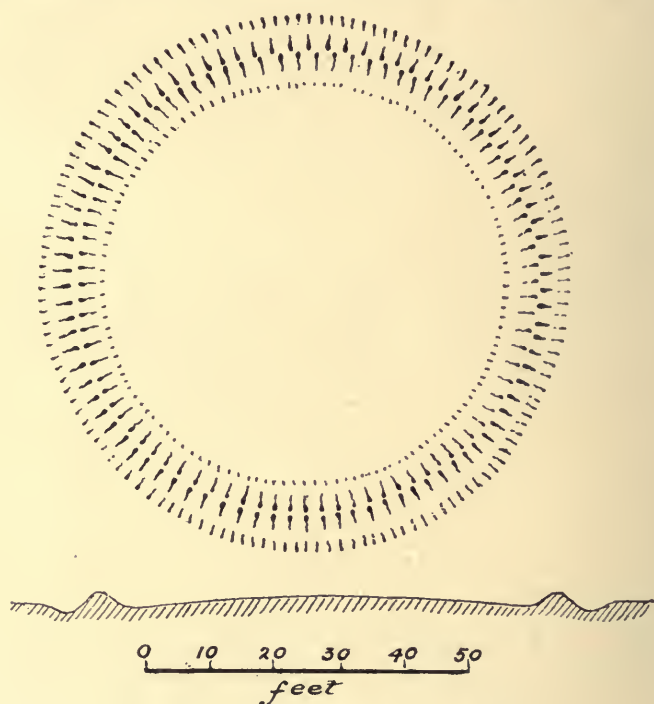


FIG. 179.—DISC-BARROW, HADDON HILL.

The most usual variety is that marked as No. 1, the least usual No. 4, while Nos. 2 and 3 are of intermediate frequency. The barrow (Fig. 179) on Haddon Hill, Exmoor, with very slight inner fosse and well-marked outer trench, shows how nearly some of these "discs," where no interior mound is apparent, may resemble simple ring-forts, especially if the wall be of piled stone; but as

a rule they are distinguishable, if not by the lack of any entrance, at any rate by their small size, their indefensible position on open plateaus, the weakness of the containing wall, their curious symmetry of plan, and particularly by the presence of the inner fosse, whenever this exists. There are, however, cases in which nothing but exploration can determine whether the particular work is a barrow or not, *e.g.* Castle Dyke, Aysgarth (Fig. 195) and Voley Castle, Parracombe (Fig. 196). In particular the dividing line between the mere burial-place and the temple, or place of ritual, must necessarily be very difficult to determine; the stone circle merges into the disc-barrow, the place of burial into the place of sacrifice. "There is no sharp line to be drawn," says Prof. Boyd Dawkins, "between the tomb and the temple"; and the statement is as true of prehistoric times as it is of the present day, when the church is still surrounded by the churchyard, and the same roof covers altar and ashes.

In too many cases time has reduced "bowls" and "bells" to an equality, obliterating all trace of any fosse and leaving only the slightest convexity of the soil to indicate their presence, so that it needs a quick eye to see them where they are, common sense to avoid seeing them where they are not. Even where they still present a bold outline, they have often been rifled by seekers after imagined treasure or possible curios.¹

The personal names often attaching to them—of Cymbeline, of King Arthur, of Hubba the Dane—are not more reliable than similar names attaching to camps,

¹ Round barrows of large size have been turned to various utilitarian purposes. They were favourite sites for windmills, for example, like the Derry Mount at Nottingham Castle. Worthington Smith mentions one so utilised at Caddington (*Man, the Primæval Savage*, p. 61), and also a *long* barrow in Dunstable to which attached the name of Windmill Hill. The practice of tomb-robbing is at least as old in Britain as Roman times. The recent exploration of the large Wick Barrow, Somerset, of the Bronze Age, has shown that it was disturbed in Roman times, if not by Roman hands.

but there are one or two instances of "tough tradition" which may bear quotation. Wright mentions the demolition in 1833 of a barrow at Mold, Flintshire. "This barrow was called by the Welsh peasantry *Bryn yr Ellyllon*, or the Hill of the Fairies or Goblins, and it was believed to be haunted. But the most curious circumstance connected with it was the declaration, made before it was opened, of a woman of the neighbourhood, that as she was going home late one night and had to pass by it, she saw moving over the barrow a spectre 'clothed in a coat of gold which shone like the Sun.'"¹ The destruction of the mound proved that it actually contained a skeleton, with which lay something long considered to be a corselet of thin gold, but now described more correctly as a horse's peytrel. It is in the British Museum. Another legend declared that within the stone hill-fort called the Cheesewring, near Callington, Cornwall, dwelt a prophet with an inexhaustible cup of gold, which was at last stolen from him by a hunter. The hunter paid instantly for the theft by a broken neck, and they buried him where he died, close by the Cheesewring, and the fatal cup beside him. When a cairn on that spot was opened recently, there was found within it a cup of gold!² And yet one instance more. One of the more prominent figures in the collection of old Welsh tales known as the *Mabinogion* is Bronwen the Fair, who is there said to have been buried "in a four-sided grave by the banks of the Alaw in Anglesey."³ In 1813 exactly such a grave was accidentally discovered and opened on the banks of the Alaw, at a spot still known locally as *Ynys Bronwen*, Bronwen's Isle. Such things may be the merest coincidences, but they have an interest even to the antiquary.

¹ *Celt, Roman, and Saxon*, p. 105.

² The story is told in Baring Gould's *Book of the West: Cornwall*, p. 107.

³ In the tale called "The Lady of the Fountain."

Mention has been made of certain mounds found within or near various camps of pre-Norman character, *e.g.* at Battlesbury (Fig. 67), at Badbury, at Shoulsbury, at Cæsar's Camp, Easthampstead, and at Mount Caburn. These have commonly been written down at once as barrows, but Pitt-Rivers showed that in some of these cases the mounds in question contained no trace of any interment,¹ and he suggested that they had probably some connexion with the original scheme of defence, or were the sites of watch-posts covering the approaches. When forming part of the enceinte as at Badbury (Fig. 21), and Muzbury (Fig. 64), and Buckland Brewer (Fig. 66), their strategic value is so obvious that this was doubtless the motive for building them. But when found within the area the case is different. Excavation has proved that some of these were actually used for burials, although it has perhaps not been proved that the mound is as old as the containing earthworks, or that it was expressly built to cover an interment. In Warbstowbury Camp, Cornwall, the mound known as "King Arthur's Grave" is apparently a long barrow; the remains of others stand within the camp at Willersey, Glos., Bratton Castle, Wilts, and Hambledon Hill, Dorset. It is generally assumed that in each of these cases the camp is of later date than the barrow. But there are again numerous cases where actual round barrows are found within the camp, *e.g.* at Smalldown, Winkelbury, and elsewhere. Here the difficulty is to determine whether the interments are coeval with the occupation of the camp. Such evidence as is at present available certainly goes to show that burials within camps are not, as a rule, contemporary with such occupation. It is more usual to find the

¹ In some cases where no trace of a body is discoverable, it is nevertheless possible that it was once there. Just as certain soils have the quality of preserving human remains, so others have the quality of consuming their every trace. This may be the explanation of many seeming cenotaphs. See Greenwell and Rolleston, *British Barrows*, pp. 201, 202.

contemporary cemetery at some spot without the defences. There are tumuli, for example, within the contour-camp of Chalbury, near Weymouth, but what seems to have been the burial-place of the men who built and occupied the camp has been discovered $1\frac{1}{4}$ miles to the south at Rimbury. If a barrow already existed upon a spot which presently recommended itself to another generation—and perhaps to another race—as the site of a camp, such barrow would naturally be made in some way to subserve the purposes of the new-comers, if not simply ignored, or even removed for the sake of the materials; and conversely a later people may have used as a burial-place some mound reared within a camp for a totally different purpose.¹

Mounds of this character are commonly very small; those just outside the ring-work at Chanctonbury are indeed scarcely discernible. In other instances mounds of much more considerable size, remote from any camp or other now discoverable settlement, have yielded no trace of any interment. Some of these may quite possibly be cenotaphs or memorials of some unknown event. It was not more unreasonable in an ancient people to raise a cairn in memory of some notable person or event, than it is for later ages to rear to the same end some unsightly monument, obelisk or column or what not. Indeed, the building of simple cairns with the same object has not yet altogether ceased. On the other hand, some of these barren mounds were certainly beacon-hearths, and others, although quite remote from any camp, may quite well have been look-outs or signal-posts. There are many such on the Exmoor hills.

Even so cautious and experienced a man as Pitt-Rivers seems occasionally to have overlooked the possibility that some at least of the earthworks of the hills may be of modern

¹ At the southern side of the area of Scratchbury, Wilts, is a mound which was perhaps a Norman *motte*.

date. Writing of the Late-Celtic fort of Mt. Caburn on the South Downs he describes, at about 700 yards to the north-north-east of the camp, "a circle of 64 feet diameter, with banks raised about 2 feet, and a square pit in the centre, having two attached chambers."¹ More recently (1907) just such another earthwork on Firle Hill, across the valley immediately to the south of Mt. Caburn, has

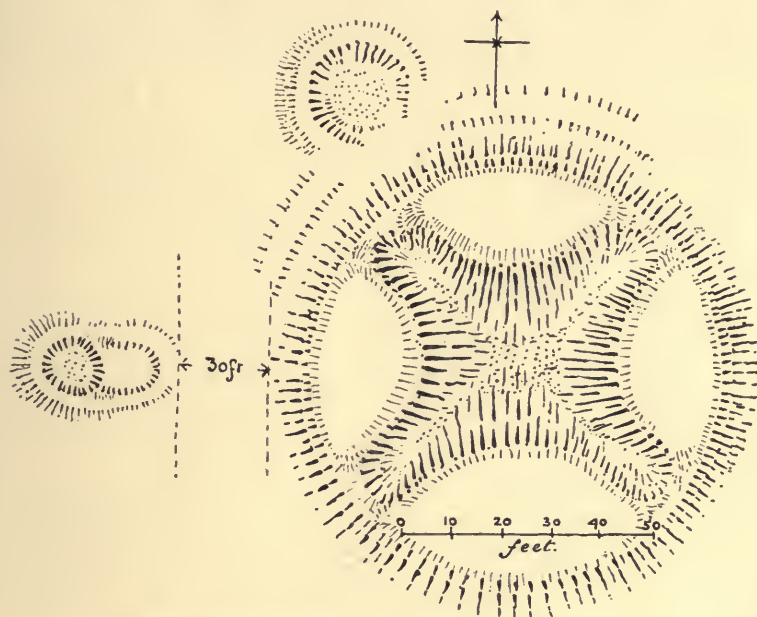


FIG. 180.—SITE OF WINDMILL, MOUNT CABURN.

been thus described: "It is an outer circular embankment which is nearly complete, including three segments of an inner concentric circle. Within these segments is a concentric square depression, and lying outside this entire figure are certain subsidiary earthen structures" (Fig. 181). But whereas Pitt-Rivers was content to

¹ *Archæologia*, xlii. (1869). A comparison with the slight cut there given will satisfy any one who knows the locality that Pitt-Rivers was speaking of the same work as is represented in Fig. 180 of the text,

surmise that what he saw was possibly an outpost of the camp on Mt. Caburn with shelter-pits for the watchers, the later observer sees in the very similar work on Firle Hill nothing less than an astronomical temple, "a Stonehenge in earth, more complete than any other structure of a similar period"; and he goes on to point out that "by drawing lines from the centre of the square through the centres of the openings between the segments of the inner circle, the points on the horizon

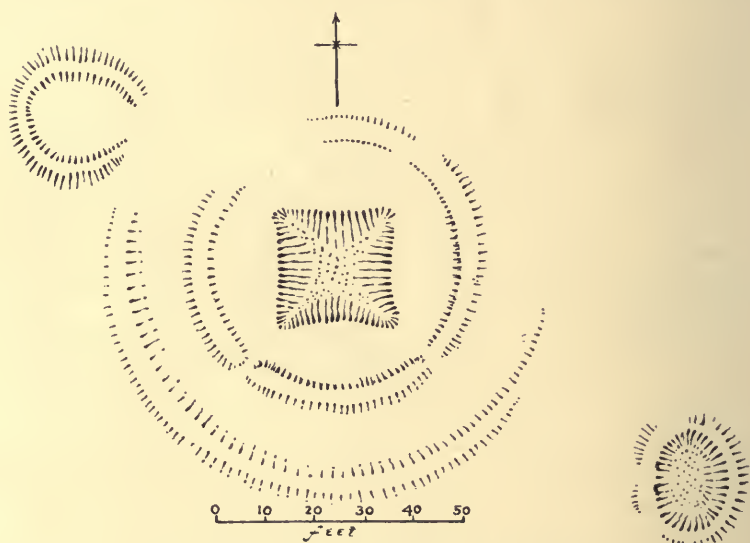


FIG. 181.—SITE OF WINDMILL, FIRLE HILL.

are struck where the sun rises and sets at the winter solstice, or on the shortest day of the year. In a similar manner, if lines are drawn from the centre of the square through the north angles of the square, the points on the horizon are struck where the sun rises and sets at the midsummer solstice, or the longest day of the year. If, again, a line be drawn from the centre of the subsidiary earthwork lying on the north-west to that of the subsidiary earthwork lying on the south-east, it is found

to pass over the centre of the square. The direction of this line indicates the point of the horizon where the sun rose and set in the old May-year." Whence it is suggested that the whole is a work dating from that "vastly remote epoch" when the year was accounted to begin in May—an epoch when the South Downs were inhabited by an immigrant race who brought with them astronomical ideas once prevalent in Egypt and Chaldæa! A little further investigation would have revealed to both authorities that there are quite a number of such cryptic

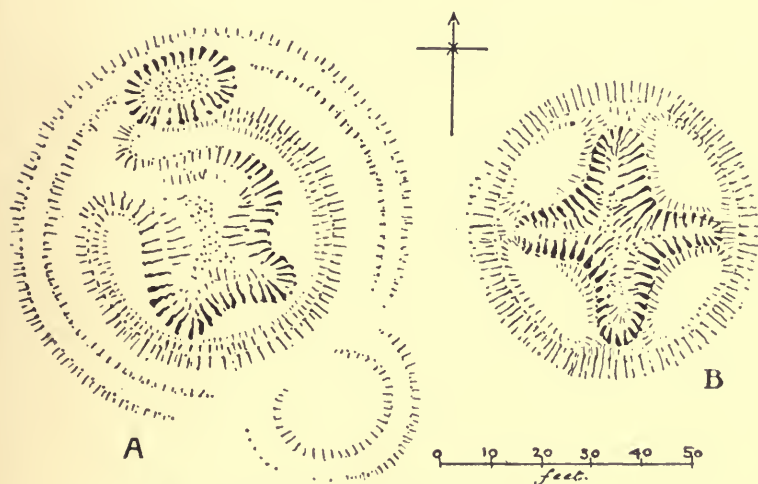


FIG. 182.—WINDMILL SITES, LEWES DOWN.

works upon the Downs about Lewes, and that in sober fact they are merely the sites of bygone windmills! There is one, for example, half a mile west of the prison at Lewes; the mill was burned down but a few years ago, and there lie two round mill-stones on the turf to prove that it stood just here; but it has left behind it, like its fellow on Firle Hill, two concentric rings of earth, a central depression of squarish plan, and two "subsidiary" works in the shape of a pit to the north-west and an embanked circular annexe to the south-east (Fig. 182 A).

There is another, less complete, a few yards to the north-west (Fig. 182 B), and yet another a few yards away from the site noticed by Pitt-Rivers on Mt. Caburn.

A very brief examination of the still remaining windmills about Lewes—there are two deserted mills out towards Kingston, and two others still in working order at Malling and Ringmer—will show how they come to leave such curious *indicia*. They are of the old type, square wooden upper structures of great size revolving upon squat circular bases of masonry. The base, sufficiently roomy to serve as a granary or store-house, has a diameter of from 20 to 30 feet. In later examples it is sometimes made of timber upon a framework of iron, but in the earlier and more lasting form it is simply a solid circular wall of mortared flints, strengthened within by four great buttresses of brick. Access to the upper structure and the machinery is gained by a heavy wooden ladder known as the tier, and an immense wooden beam projecting from the floor of the upper structure and passing through this ladder is ingeniously contrived to serve both to turn the mill round, and so bring the sails to the wind, and also to raise the tier from the ground when such turning is necessary. When once the mill has been swung to the desired point of the compass the tier is allowed to rest upon the ground, and so serves, as it were, to anchor the sails in position. Around the base of masonry the soil gradually accumulates with the years, as it always does at the foot of any wall, until the ground acquires a barrow-like hump; and this is exaggerated by the contrary action of the tier, the weight of which slowly scores out a trench in the soft chalky soil. These two agencies produce between them the inner circle which always marks such sites. The outer circle is similarly produced simply by the repeated tread of many generations of millers, as laboriously they swing-round the lever-beam. This outer ring is rarely very well marked, often scarcely discernible, the reason being that it takes longer time to

make it. Both the inner and the outer rings are easily traceable about Ringmer Mill. Burnt down, blown down, blown up sometimes (as on Lewes Race-course), or simply left to break up in decay, the windmills vanished piecemeal, and their disappearance was completed by the carting away of the mason-work and the grubbing up of the last brick. This process has naturally left a hole in the centre of the site, and as the most deeply set parts of the masonry were the four great buttresses, the hole has assumed a square or quatrefoil plan more or less regular. Finally, as even millers crave for companionship, these lonely dwellers on the windy Downs occasionally kept fowls, and these they housed in shanties close at hand. Hence the mysterious pits, embanked or otherwise, and other such "subsidiary works." If any one doubt it, let him go to Ringmer Mill and see for himself. It may be added that, though seemingly all memory of the mill has vanished out of West Firle, there still remains a flight of steps cut out of the steep face of the hill and leading direct up to the "Stonehenge in earth," and there still attaches to these the sufficiently convincing title of the Miller's Steps.

The millers of the Downs are all but gone, and the last of their mills must soon cease to struggle against the competition of steam roller-mills and the modern taste for tasteless bread; but should there come to their dusty shades any intelligence of the matters which vex the minds of men on earth, they must laugh jollily to think of their old haunts translated into temples of "the dim red dawn of man," of themselves apotheosized into sapient astronomers, and of later-day Quixotes so over-read in Druidical lore that they must needs ride a-tilting against windmills! And where shall the student of earthwork find a more homely lesson in all that an antiquary should be?—cautious, and again cautious, and yet a third time cautious.

The Welsh and Irish mounds built up of discarded fire-

stones have been described above.¹ They are easily recognized by the signs of fire about them, and by their position at low levels near to springs. But there are other cairns of which the origin is less obvious. Some are funereal barrows, and these are generally at high elevations. On the other hand, not every cairn on a hill-top is a barrow, or even old. The Ordnance Survey has involved the building of some as trigonometrical stations, and others mark quite late burials of persons whose sole distinction was murder. Some cover the bones of favourite hunters only, or even of dogs, and some are merely so many "follies." Many have been formed, and are still being formed, by the simple process of collecting into convenient heaps the stones which in many localities interfere with the work of agriculture. A few have their origin in old superstitions hardly yet defunct. In some parts of the island it is still customary to erect cairns of some size at every point at which the coffin has rested in the progress of a funeral cortège.² These road-side cairns are at lower levels. In some localities it is, or used quite lately to be, considered unwise to pass a certain spot without tossing a stone in its direction, the belief being that it was haunted, and that the ghost might thus be laid. Cairns of quite considerable size and much appearance of antiquity have been thus built up within quite recent times. And not a few mounds, larger or smaller, are not artificial at all. One which stands within the churchyard of Old Hunstanton has lately been examined and shown to be a purely natural formation, although nothing but its precise resemblance, not in shape and size only, but in position also, to a tumulus, a motte, or a moot, led to its investigation. Only a close acquaintance with geological principles and local peculiarities can prevent a good deal of disappointment of this kind. In

¹ See pp. 215-218.

² Mitchell, *The Past in the Present*.

a certain northern county men still laugh over the case of an eminent antiquary who, for the enlightenment of a number of kindred spirits, enlarged upon the mound on which he stood, its unknown age and mysterious significance, the scenes which it had witnessed, and the secrets which it might conceal; while of his audience only the vicar of the parish knew that it had been made by the vicar's orders! Some of the Yorkshire dales, and Wensleydale especially, are full of natural mounds, some of great size, curiously like mottes and barrows; indeed, they may occur in any gravelly locality. Some of them have unquestionably been tampered with, whether by older generations who terraced and scarped their sides and reared smaller mounds upon their summits, or by later generations of gravel-diggers. Mention has been made (p. 521, note) of a good instance at Berryhills, near Kirklington; the very name is suggestive, but the mound is as entirely natural as are the adjacent Yammergarth Hills.

The beacon-hearths which are to be found in so many hill-top camps—*e.g.* Mt. Caburn and Ditchling Beacon, and Dowsborough in the Quantock Hills—are mostly of late date. Some of them may perhaps be older, but it is a difficult thing to prove.¹ Beacon-fires were used by the Celtic tribes, whether for alarm signals or for ritual purposes; they are thought to have been used for more practical purposes by the Romans; they continued in use during the Middle Ages, whether as war-signals or as Beltane-fires; and they still survive, if only as one of the tokens "when a mighty people rejoice."

Barrows, beacons, cairns, and Ordnance-marks mostly belong to the higher levels. Lower down occur other varieties also. Many seeming barrows are really the

¹ Jack's Castle, Stourhead, was counted a beacon-mound until excavation proved it to be a barrow of unusual size.

botontines of Roman land-surveyors, and on excavation produce nothing more valuable than bits of pottery, animal bones, and a handful of wood-ashes. They are always of small size. But another class—the moot-hills—may vary from something no bigger than a *botontine* to proportions as large as those of an unusually fine barrow or even of a motte. These moot-hills marked, in Saxon times and long after, the meeting-place of the population of a village, of the warriors of the Hundred or Rape or Wapentake, of the tenants in manorial courts. The constantly repeated assertion that such meeting-places were always mounds is quite unwarrantable; any convenient landmark would serve—a tree, a stone, a bridge, a wayside cross, even an ancient camp like Badbury and Desborough Castle. Old barrows were convenient just because they were conspicuous and numerous. Only when no suitable landmark existed might the trouble of making a mound actually be taken; and it may be considered doubtful whether the making of such moot-hills was ever anything but exceptional. Some so-called moot-hills on village greens were probably nothing but the sites on which were planted the May-poles. Whatever its origin, the village moot had little chance to survive amongst the growth and decay, the building and rebuilding of centuries. That of the manor has escaped sometimes, protected, perhaps, by its position on the lord's domain and close to his dwelling; but it is quite likely that many of those so-called manorial moots are merely the remains of the original motte of the lord's dwelling, adapted later to other purposes. At Walton-on-the-Hill, Surrey, is a fine and steep-sided oval mound some 12 to 15 feet in height, with a level top about 90 yards in circumference, and along part of its base a shallow ditch. Close beside it is a small water-hole, to which attaches the significant name of the "Court Ditch." It doubtless obtained the name because the mound was used as the moot of the manorial

court, for Walton was once a place of importance and a royal manor. But it is much more reasonable to suppose that the mound was built originally to be the lord's dwelling than merely to serve as a place of meeting—that it is a *motte* degraded to a moot-hill—and the traces of the surrounding ditch bear out this view. It was needful to the *motte*; it was needless to a moot-hill. There was until recently a precisely similar mound at Warrington, likewise used as a moot-hill, and the mound at Cublington, indubitably originally a fortress, was very possibly later the moot-hill of the Hundred of Cottesloe.¹ Less pretentious moots have survived here and there in the low heaps of earth out of which grow ancient trees on the greens of English villages. They long ago ceased to have any *raison d'être*, and Parish Councils do not seem to promise to resuscitate them.²

At the very lowest levels, in such areas as the great flats of Somersetshire and the salt marshes of the Thames and Medway, occur mounds of yet another class, viz. spacious depressed platforms rising very slightly above the dead level of the surrounding soil. In wet seasons, when the rest of the land is frequently under water, these mounds appear as so many islands, where collect the cattle to be out of reach of the floods. It was for this express purpose that some of them were built, and though pumping and the improvements in drainage and the better maintenance of the sea-walls have mostly made them needless, they were until recent times a very real need, and still occasionally prove useful. There are many of them in the Sedgemoor levels, where local tradition has it that they are the grave-mounds of those

¹ Another well-known instance is that at Downton, Wilts.

² A great deal of information about moot-hills and their use is to be found in Gomme's *Primitive Folk-moots*. The best known instance is, of course, the Tynwald Hill, Isle of Man, from which are still read out in full court the laws enacted by the House of Keys.

who fell in the fight of 1685; and similarly in Kent, where they are known as "cotterels," they are reputed to be the burial-places of Norse pirates. The majority of them are perhaps of no great antiquity, but one at least can boast a history of a thousand years, namely the famous Isle of Refuge at Athelney, which the *Chronicle* declares that Alfred "wrought." They vary in size and elevation, but all are rather platforms than mounds.¹

All along the coast of Essex, from Burnham to Walton-on-the-Naze especially, are to be found other mounds of entirely different origin. Locally known as "Red Hills," these are artificial accumulations of soil coloured red by firing, in marked contrast with the dark peaty colour of the local alluvium. That these mounds are of very high antiquity is proved by the constant discovery of pottery of Roman character within the red earth. They have been variously supposed to be the sites of old glass-workings, of salt-pans, or of potteries; and while the last is the least unlikely theory, they do not show the kind of refuse and débris which might be expected on the site of a pottery. Beneath them, on the surface of the clay, have been found fragments of Late-Celtic pottery, and within them certain wedge-shaped pieces of burnt clay, said to be precisely similar to the wedges still used by the Staffordshire potters in firing their wares, with other cylindrical pieces which may possibly be fragments of brandreths, fire-bars, &c. Of permanent human occupation there is no sign at all.

The "Red Hills" vary in area from less than half an acre to several acres, and their elevation above the present surface from two to five feet. They occur in irregular fashion, singly, or in groups larger or smaller, with no obvious method. Some of them lie on and in old "rills"

¹ The similar work called Rat's Castle, at Wartling in Sussex, was perhaps one of them.

or waterways, and all the known examples seem to be placed very close to what was the limit of the tides before the sea-walls of this coast were constructed. Like the coterrels above mentioned they serve upon occasion as cattle-refuges, and in some instances they have at a remote period been improved into formal cattle-pounds, circular or otherwise, by drawing a slight trench round the mound and heaping up the excavated material into a vallum along its inner edge.¹

The making of enclosures with walls of earth or stone, with or without a ditch, is too elementary a method ever to have gone altogether out of use, even in these days of barbed wire and iron railings. Such enclosures are still made in districts where the climate requires that the flocks

¹ A Committee of Investigation carried out a considerable amount of digging upon red-hills near Langenhoe and Mersea Island during 1906-7, and the report of its results was presented to the Society of Antiquaries in March, 1908. These results were in the main negative, but it appears to have been proved that the red earth has been brought to the spot from some other locality, probably not very remote; that it consists of the refuse of pottery-works particularly concerned in the manufacture of a definite and limited class of articles expressly designed for potters' use; that this refuse is not later than the Roman period; and that it was conveyed to its present sites by water, at a time antecedent to the construction of the sea-wall within which the red-hills now lie. So far as the excavations went, they proved also that the surrounding of some of the mounds with fosse and vallum was a later event. That the hills were originally constructed to serve as cattle-refuges is hardly a tenable theory; the labour involved would appear to be too great, and the positions such as to render such works *at the date of their construction* needless. If it be permissible to advance any theory in a matter so perplexing, it might be suggested that the mounds represent the initial steps towards constructing a sea-wall, the material being shot overboard from lighters at points to which such vessels could reach. For whatever reason, some or all of these mounds were not used in the final embankment, and therefore remained as islands within the reclaimed marsh. When the marsh came subsequently to be intersected by deep ditches and drains, impassable to sheep, it was found convenient to utilise some of the mounds as "coterrels," and they were accordingly fossed and embanked. This theory falls in with most of the facts thus far ascertained, if it still leaves unexplained the source whence was brought the red earth. Was this possibly from kilns in the vicinity of Camalodunum or of Othona? Similar deposits of red earth occur on the coast of Normandy, near Caudebec.

should be not merely folded, but in some measure sheltered. This accounts for the immense amount of labour expended upon the wide balks dividing the fields of Cornwall, and the similar fences of Exmoor, usually planted with vigorous hedges of beech, which at once so much improve and so greatly limit the wayfarer's view; for fences less impervious to wind and less high would fail to safeguard the sheep from the violent gales and drifting snows of these uplands. Without doubt many of the stone ring-works of the northern counties and of Wales are quite recent constructions with the same purpose; and while some of the pounds of Dartmoor are prehistoric, others are certainly vastly later in date.

To this class of work belong the pele-garths of the Border, many of which were built as late as the seventeenth century or later still. These are enclosures, usually of circular or oval plan, surrounded by one or sometimes two dry-built walls with or without a fosse. Less commonly they show an angular plan. They are to be distinguished from camps proper by their relatively weak construction, by the absence of any elaborate means of defending the entrances, and most of all by their indefensible positions. Unlike the camp, which stands commonly in a lofty position with no attempt at concealment, the pele-garths are usually found at low levels, hidden away under the shoulders of the hills or in the valleys, where it might be hoped that they would be overlooked by raiding moss-troopers. Their purpose was as obviously merely to keep in the cattle as that of the camp was to keep out the enemy. They are, in fact, Bawns (p. 232).

Far down into the Middle Ages the English used precisely the same method for the defence of their villages, wherever occasion required it. The primitive settlement of Angle, Jute, and Saxon was a cluster of rude huts planted upon a clearing in the forest and surrounded by a

ring fence.¹ Where a great lord made his residence there would be constructed some sort of stronghold, presumably a stockaded site, and within its immediate vicinity his "men" would be secure; but those who dwelt in outlying hamlet or village had to make their own defences or go without them. They followed in a humbler way the same method as did their lord, entrenching the village within vallum and fosse and palisade. Within this ring-fence stood their huts and the three other essentials of the time—church and manor-house and mill. Whether the ditch held water or not was of course a question of soil and elevation; probably it was in many cases dry, but there are instances in which a wet moat constitutes the common defence of village, church, and hall. Right down to the thirteenth or even the fourteenth century these local defences continued to exist. The English were always great makers of hedges,² and the hedger was an important

¹ The Celtic Christians are said to have followed the same plan in Ireland, Cornwall, Wales, &c. The village gathered around the church, and the church was but the centre of a monastic settlement larger or smaller, which was for security provided with hedge and ditch. To such enclosures refer the words *llan* (Welsh), *lan* (Cornish, Breton), and *lis* (Irish), as in Lismore. There is no need to think that the Saxons copied their Celtic missionaries, but they may have done so.

² The Normans termed the hedge "haia" (Fr. *haie*), and the word survives in the dialectic form "hay," as well as in the termination of such place-names as *Oxhey*. The etymology of "ha-ha," an eighteenth-century equivalent, is said to be different, expressive of the surprise with which the wayfarer found his customary path barred by some newly planted hedge. Reference has been made above to the hedge-fencing of the Nervii; their neighbours the Frisians have left the memory of a like skill in "*cheval-de-frise*." The complete isolation of each English settlement until comparatively recent times is difficult to realize, but a fact. In early Saxon times, as in early Rome, *hospes* and *hostis* were synonymous—a "foreigner" was likewise a "foe"; and "foreigner" signified any one not of the community. The peasants of Lincolnshire still use the word in the same sense, and speak of a parish no further off than the other side of a moderately big river as "foreign parts." It is said that the satirical stories told by one village at the expense of another are the survivals of a time when the more active hostility of the earliest period had given way to the milder hostility of abuse and suspicion. Gotham and its wiseacres is the stock example, but there are many more. The men of Piddinghoe (Sussex) are alleged to have been in

member of the community long after Langland's time. With the extermination of the wild animals and the suppression of private war the need of these defences ceased, and cultivation has mostly destroyed their every trace. Very distinct traces of the ring-fence remain about the site of the old village at Cublington (Bucks), and the course of the old fence may be traced right round the neighbouring village of Hoggston (p. 397). It is known that Cublington was transferred to a new and unfenced site about 1400, and it may be inferred therefore that by the end of the fourteenth century such stockades were deemed no longer needful, at least in the Midlands.¹

Some at least of the many instances in which a church is found within the lines of ancient earthworks must be relics of this primitive form of settlement, those cases in which the church is moated being analogous, but probably later. These earthworks were not always of Saxon construction; instances have been cited where advantage was taken of existing Roman defences, and there are others where the church stands within still earlier

the habit of shoeing their magpies; the village Solomons of Pudsey (Yorks) are said to have put manure on the roof of their stunted church-tower to increase its height; and it was a Cublington man who, having once travelled the 20 miles to Wycombe, observed with surprise that at Wycombe too there seemed to be the same moon as at Cublington!

¹ The remains at Cublington are of interest as preserving not only a portion of the plan of the old village and a considerable part of its enclosure, but also a moated mound evidently of Norman type. It is marked upon the Ordnance Map as "tumulus," and locally has the name of The Beacon, but of its original character there can be little doubt. It stands right in the centre of the village enclosure, and excavation brought to light, immediately to the east of it, some sixty interments, marking the site of the ancient graveyard. The approximate date for the desertion of the site is furnished by a brass in the church of the present village, a few hundred yards further to the east, which records the name of John Dervyle, "first Rector of this church," who was buried in 1410. The manor was, *temp.* Henry III., held by Geoffrey de Lucy, "then in rebellion against the King" (Lipscombe). The character of the remains suggests that the motte was perhaps raised at that date, for it appears to have been constructed at the expense of the village rather than *vice versa*—that it was, in fact, an "adulterine" castle.

defences.¹ But inasmuch as the village church was for many centuries the only defensible building, it is likely that some of the earthworks found about churches may be of much later date; but their constant attribution to the days of the Civil Wars is certainly groundless in most cases, if not in all, for by that time there were plenty of other and more defensible buildings which could be utilized as fortresses.²

Wall and hedge and fosse were again the regular means of enclosing woods and forests, estates larger or smaller, and indeed any area which required to be fenced.³ The great manor of Oxhey (Middlesex) was apparently named from its being enclosed, in whole or part, by an "ox-fence"; and the deed by which King Æthelred the Redeless confirmed the original grant of it by King Offa to the Abbey of St. Albans, proves that the name dates back at least to 1000 A.D. Throughout mediæval times occur references to the making of such enclosures by the landowners, ecclesiastical and civil: thus the monks of the Charterhouse of Witham, Somerset, provoked much ill-will by enclosing a certain area of wood with a ditch and wall and hedge. Such an enclosure was sometimes termed

¹ See below, p. 561.

² The tradition of the indubitable fact that the village church—usually the only stone building existing—frequently served its congregation as a fortress, survives in the absurd belief that the narrow window-slits with very wide inner splay, set high up in the walls, which are characteristic of the earliest ecclesiastical architecture in England, were expressly designed to be used as loopholes—against the Danes, says the usual tale. A more real reason was the costliness of glass and the wish to minimise draughts. In the northern counties the churches continued to be fortresses throughout the Middle Ages. The tower of the church at Burgh-on-Sands, Bowness, was a pele, and so far south as Bedale may be seen another, once furnished with a portcullis to screen it off from the body of the church, and so turn it, on occasion, into a stronghold. Others are found on the Welsh Marches.

³ One of the most remarkable examples of the practice in modern times was the construction of a huge wall, 40 miles in length, round that portion of Exmoor "Forest" which was purchased in 1818 by a Mr. Knight. The wall is there still, or rather part of it, for like most modern articles it has not worn as well as does older work.

defensum, so that the occurrence of that word does not necessarily imply a military work. There must have been a great deal of such fencing done as early as the fifteenth century, when stock-farming so largely replaced the older method of cultivation, in which few or no hedges were needed.¹ Whenever and wherever stock was kept on any considerable scale there must have been constructed some sort of pound or fold, and it would usually be built in the same way, suitable stone being in most cases difficult to get and often troublesome to work. Such pounds were provided also for the convenience of drovers when taking their cattle to market. The hill overhanging Wells (Somerset) appears to take its name of Pen Hill, not from the familiar Celtic word so spelt, but from the fact that upon its slope was built, and may still be seen, such a "pen-fold" for the use of drovers bringing down their stock from the grazing lands of Mendip.²

The village stockade is rarely traceable to-day. In most cases it has vanished utterly, while the original church, Time and the architects notwithstanding, still endures, and more substantial representatives have replaced the wattled hovels of churl and villein. But there are very many instances where the entire settlement has died out, leaving perhaps its ancient name attaching to some hamlet near by, to the Hundred, or even to a single farmstead—leaving occasionally not so much as a name

¹ Exactly the same method was, and still is, followed in afforesting an estate, each new plantation being enclosed within its own ring-wall of earth, and the making of such wall always entailing the digging of a fosse. Probably these old boundary-fences have been at times mistaken for older earthworks, and so given rise to the belief that "camps" once existed where no trace of them is now discoverable. Some of them bear a very close resemblance to the genuine old ring-works, and the smaller ones in particular closely resemble some specimens of disc-barrows, &c. In some counties the keepers speak of them as "roundabouts."

² The name of Poundbury, the fine camp close to Dorchester, suggests that the Saxons may have found that and similar earthworks of use as cattle-pounds. "Pen" or "The Pens" is not an uncommon name for any earth-work in the form of an enclosure,

behind.¹ So slight were the dwellings of all but the great folks, even down to the fifteenth century, that Time alone was more than competent to remove them; and when Time was abetted by the purposeful efforts of the ploughman, the last vestige of their very foundations vanished within a few years. Still there survive not a few sites of such deserted villages, of varying antiquity. Mention has already been made of Cublington,² Bucks, which is doubly exceptional in that the lord's motte still remains, and that the date of the abandonment of the site about 1400 is recorded. The date is significant: it is only a year or two after the Peasant Rising, and only a generation or so later than the first voicing of the abasement of the village-population by Langland in *Piers Plowman's Vision*. It is about midway between the terrible year of the Black Death (1348) and the culmination of the effects of that visitation in the substitution of grass-farming for plough-farming, whence resulted a great shrinkage in the demand for rural labour, and the commencement of that Rural Exodus which is still in progress. Many a village was emptied outright by the plague, from many more the few survivors melted away for lack of employment, or were forcibly ejected by those who desired to extend their sheepwalks. What had been the common land of the village was now enclosed and given over in whole or part to grass, and in this way the skeleton-outline of a few villages of the fourteenth century may have been preserved. Other causes were as effective elsewhere, and more expeditious, *e.g.* fire³ and

¹ There are, it may be pointed out, a number of manors and villages mentioned in Domesday for which no equivalent is discoverable to-day.

² See p. 548.

³ This was the worst enemy. In every dry summer one hears of cases of the destruction of half a village here and there by fire; in the old days, when houses of brick and stone scarcely existed, the risk was far more real. In Elizabeth's time it was compulsory that there should be kept grappling-hooks in every village or town, so that when fire occurred the adjacent tenements

flood and storm. The village of which a plan (Fig. 183) is here given, now represented by Bingham, Notts, which stands some hundreds of yards away to the west, is said to have been destroyed by a hurricane. In Leicestershire, which is almost exclusively a grass country, several such

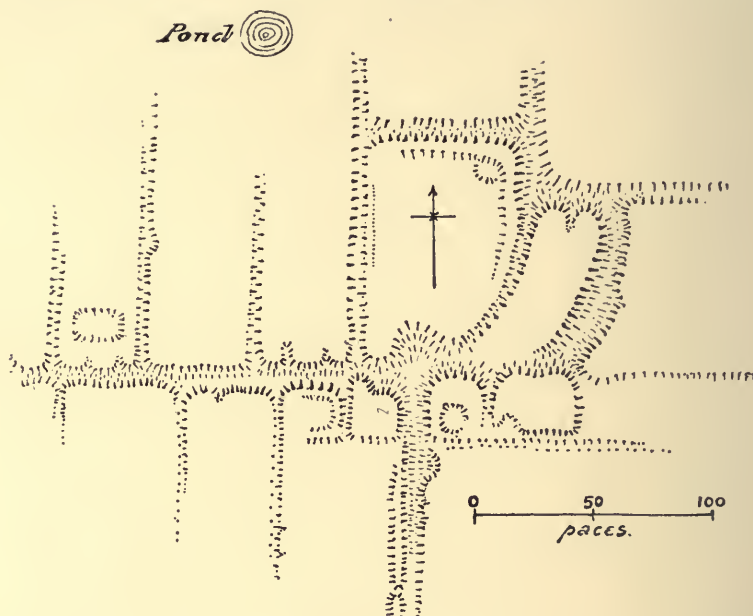


FIG. 183.—CROW CLOSE.

sites have been preserved¹; and there are, indeed, few counties which cannot show some such vestiges of the flux

could be *pulled down*—a sufficient commentary upon their unsubstantial fabric. A pair of such grappling-hooks, like exaggerated drags on long wooden poles, was to be seen a year or two ago hanging upon a convenient wall by the wayside as one entered the village of Warboys, Hunts. They may be there still. There are others at Welwyn, in Hertfordshire, and at Tring.

¹ They were noticed incidentally by Thos. Wright, *Celt, Roman, and Saxon*, p. 115, citing other authority. Those mentioned are all in the north-east of the county, near Ingarsby, Cold Newton, and Humberstone. The last named shows traces of its original defences, “three sides of an encampment or enclosure, defended by a mound and trench.” It was probably the site of the mediæval town of Hamilton.

of population. The characteristic of these sites is the rude rectangularity of the individual foundation-blocks and of the streets, the latter being, as a rule, mere shallow, flat trenches, dividing the area in chequer-fashion, while the foundation-blocks are uniformly raised above the road-levels. No traces of brick or stone are discoverable: firstly, because the cottages of the mediæval village rarely boasted such substantial materials, and secondly, because wherever such débris was to be found it was speedily carried off to be used for other purposes. All that remains will usually be pottery of mediæval type—quantities of it pass for Roman ware—and this is usually buried out of sight under the turf which has alone preserved the ground-plan of the village. Where the plough has passed, every trace of the plan will have vanished, but the pottery will remain in abundance. Of the buildings, the church, or part of it, is commonly the last survival. At Lullington, Sussex, is such a church—the chancel only—of early “Saxon” work, but of the homes of the men who built it and worshipped in it there remain but one house of some antiquity, originally perhaps a clergy-house, and the tell-tale pottery which litters the surrounding fields. A similar example is Botolphs, near Bramber; and a couple of miles south of this is a third, Coombes, where there is left literally nothing but the church. The name of Quarrendon, Bucks, denotes merely the ruins of a desecrated church and the remains of the fine moats which once enclosed the mansion of Sir Henry Lee, a worthy of Elizabeth’s days. Just such another moat and ruined church remain at a nameless spot some 6 miles to the north-west beyond Quainton. Altogether there are more than enough of such deserted sites to justify the description of the desolation of England in the early sixteenth century, which old Sir Thomas More puts into the mouth of Maister Ralph Hythlodaye in the opening pages of *Utopia* (1548).

There used to be on Uffculme Down, Devonshire, a curious earthwork (Fig. 184, A), known as the "Pixies' Garden." It was a square of 60 feet or so, surrounded by a bank of earth 2 feet high, and divided into four smaller squares by cross-banks which met in a small mound at the centre. There was an entrance-gap at each corner of the outer enclosure, and in the middle of the floor of each of the smaller squares a low oval mound.¹ Warne describes two similar but very much smaller works (Fig. 184, B) which used to be visible on Brow Down, Dorsetshire. These measured only about 6 or 7 yards square, and were

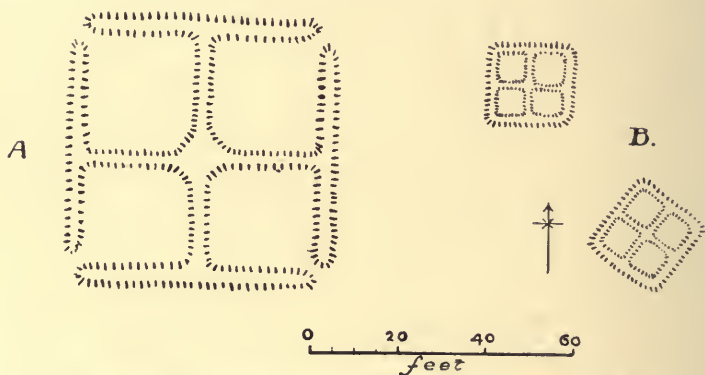


FIG. 184.—EARTHWORKS. A. UFFCULME; B. BROW DOWN.

arranged "in juxtaposition and lozenge-wise." He does not speak of any entrance-ways, nor hazard any opinion as to their date or purpose. Perhaps they were merely shelters for sheep, analogous to the less elaborate cruciform shelters still built by the shepherds of the Yorkshire fells, the plan of which is such that, whichever way the wind may blow, the flock can always find cover under a lee-wall. The construction of other and still smaller cruciform banks for rabbit-traps is mentioned elsewhere (p. 690).

¹ Lysons, *Magna Britannia*, vi., 353; *Journal Brit. Arch. Assoc.*, xviii., p. 63. The writer of the latter description does not mention the oval mounds, nor does his plan show any entrances.

At Banwell, near Cheddar, Somerset, are two earthworks less than a mile apart. The one is a simple but formidable ring-work of 20 acres, crowning a hill above the valley of the Axe; the other is anomalous—a rectangular enclosure (Fig. 185) contained within a slight outer fosse and small vallum, measuring 55 yards by 45 yards, with a single entrance at the eastern end. The floor of the enclosure is quartered by a raised bank of earth about 2 feet in height and 10 to 12 feet in breadth, in the shape of a cross, the arms reaching almost to the surrounding vallum. Colt Hoare,¹ unwarrantably remarking that “its form proclaims it to be Roman,” admitted that he could not conceive its purpose. Later writers ventured the theory that it was perhaps an agrimensorial cross,² and this tentative suggestion has now become positive assertion. There appears to be no justification of this theory: “No Roman remains have ever been found in or near the earthwork, despite excavation, and the thing itself seems to belong to a large class of non-Roman earthworks.”³

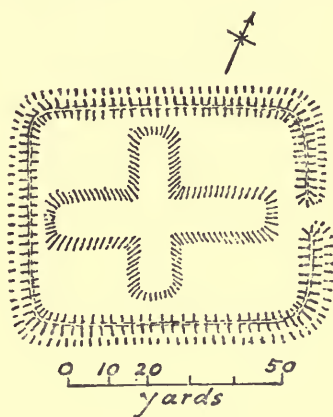


FIG. 185.—BANWELL CROSS.

¹ *Ancient Wilts*, Roman Period, p. 43. Rutter (*North-West Somerset*, 1829) says that the cross was surrounded by a slight fosse.

² See Coote, *Romans of Britain*, p. 101. There is one cruciform work of indubitable Roman construction in the country, viz. at Richborough, Kent. This, however, is of mason-work. Its purpose is quite unknown. It is commonly imagined to have served, perhaps, as the base of some sort of *pharos* or beacon. Coote, however, declared it to be another agrimensorial cross, despite the fact that it stands actually within the fortress. See Roach Smith, *Antiquities of Richborough, Reculver, and Lympne*.

³ There are, however, plenty of the usual traces of Roman occupation in the near vicinity. The quotation is from Prof. Haverfield, in his admirable chapter on Romano-British Somerset, printed in the *Victoria County History*. The agrimensorial cross was the starting-point of the Roman land-surveyor's

Coote gives particulars of one or two other cruciform works, but there is considerable doubt whether any of them can be shown to have anything to do with the Romans; commonly they are directly associated with burials, and even concealed within and beneath barrows. The greater number belong to the East Riding of Yorkshire. In the case of one found at Fimber in the Wolds, a cruciform pit 9 feet deep had been excavated in the soil, and on its level floor had been built a low cross of "oolite, lias, chalkstones, and some clay," the four arms oriented with exactitude to the four cardinal points. This had been covered over with earth to a depth of 5 feet, and a second somewhat slighter cross had been constructed immediately above it, the whole being concealed under a barrow of normal appearance.¹

From the river Cam at Waterbeach across Cambridgeshire to Earith, and so northward through Huntingdonshire to Lincoln, runs an ancient waterway known as the Car Dyke. In part perhaps natural, it is for much of its course entirely artificial, and its original dimensions may be gauged from the fact that it is still in places as much as 60 feet wide and upwards of 20 feet deep. The very ancient canal called the Fosse Dyke, connecting the Witham at Lincoln with the Trent at Torksey, has been thought to be a contemporary extension of the same work. Be this as it may, there is excellent reason for believing

centuriation : see Smith's *Dictionary of Greek and Roman Antiquities*, s.v. AGRIMETATIO. "Roman land-measurement," adds Prof. Havertfield, "is a very difficult subject, and theories connected with *botontini* are best left alone." See Montagu Sharpe, *The Roman Centuriation in the Middlesex District*. Banwell Cross is now so densely overgrown as to be scarcely recognisable.

¹ See on this matter a paper in *Yorkshire Archaeological Journal*, vol. ii., p. 69. It is hardly needful to remark that the Cross is not exclusively a Christian symbol. It was, for example, a symbol of religion in Minoan Crete, and it is a well-known motive in the decoration of British pottery of unquestionably prehistoric age. See Greenwell and Rolleston, *British Barrows* (*passim*).

the Car Dyke to be in the main a Roman work, whether intended for drainage or for navigation, or for both purposes.¹ Upon its banks occur certain curious earthmarks of very slight relief and peculiar plan (Fig. 186), which would seem to be the traces of some kind of water-cultivation, the general scheme showing a series of narrow strips of soil divided by parallel trenches which all communicate with one larger trench, and this again with the

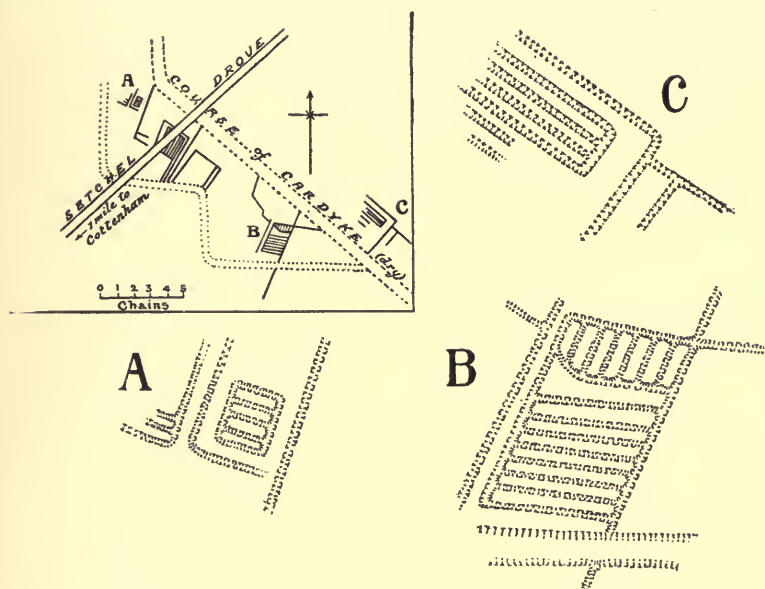


FIG. 186.—EARTHMARKS AT COTTENHAM.²

Car Dyke. The smaller trenches are about 18 inches wide, the strips of soil about 2 feet across, and their present relief above the bottom of the trenches no more than 9–12 inches. The larger trenches may have had a depth of 4–5 feet. From the quantity of pottery, coins,

¹ The existence of other canals of Roman date in Britain has not thus far been investigated.

² It is not easy to convey by any figure at once the character and the faintness of these earthmarks, which are so slight as to be discernible only when the grass is cropped its closest or in the winter months.

and other relics found associated with these works (which are most noticeable at Cottenham, 10 miles from Cambridge, and in less degree at Somersham, Hunts) there can be very little doubt of their Roman or Romano-British origin.¹

¹ There is an article on them by Rev. C. H. Evelyn White in *Trans. Cambs. and Hunts. Arch. Soc.*, vol. i., part 1, p. 55 (1901). For more exact particulars the present writer is indebted to Rev. F. G. Walker, who personally investigated the works at Cottenham, and believes them to be analogous to those constructed by the Japanese for purposes of water-culture. Similar earth-marks, if any exist, seem scarcely to have been noticed, but the writer has seen something of the sort in Whaddon Chase, upon the banks of a small feeder of the Ouzel River, some 4 miles from the Roman station at Fenny Stratford.

CHAPTER XVII

MISCELLANEOUS EARTHWORKS (*continued*)

*"No priestly stern procession now
Streams through their rows of pillars old ;
No victims bleed, no Druids bow—
Sheep make the daisied aisles their fold."*

IN a class apart stand a number of earthworks, unquestionably prehistoric, of which the peculiar feature is that the fosse, usually of striking dimensions, lies within the vallum. They are not numerous, the chief examples occurring in Wiltshire, Dorset, Yorkshire, Cumberland, and Westmorland. In size they vary from the gigantic circle of Avebury, 400 yards across, to rings of no more than 50 paces in diameter ; in plan they are mostly elliptical or circular, and they are usually remarkably regular ; they are found singly, and in groups of two or three ; and they lie in localities offering few or no facilities for defence. The peculiar position of the fosse makes it unlikely that they were intended for defensive purposes or for the herding of flocks ; and the entire absence, in such as have been examined, of any remains of habitations within, or of subsidiary defences without, seems to point to the same conclusion. In the case of Avebury, once a stupendous monument "as much surpassing Stonehenge as a cathedral doth a parish church," few now doubt that the work was of a religious

character, and the similar but smaller works are usually supposed to be of the same class.

Of the tremendous peristalith which once fringed the inner edge of the fosse at Avebury (Fig. 187) there now

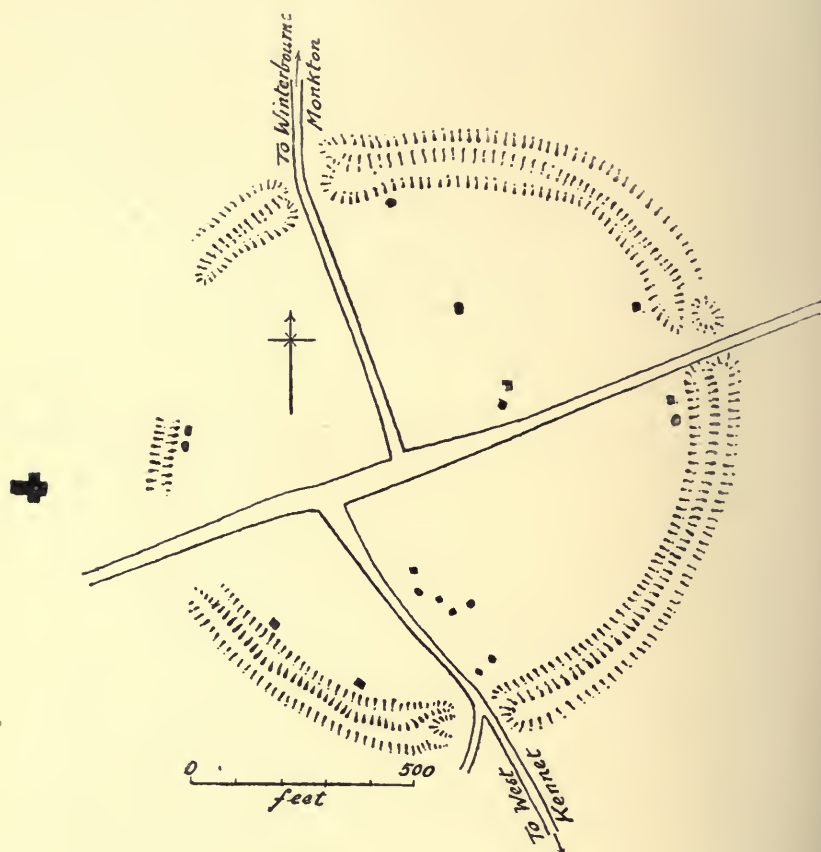


FIG. 187.—EARTHWORKS OF AVEBURY.

remain *in situ* nine stones only. Of the two double concentric circles of megaliths which occupied the area there remain erect only six stones. All the rest, calculated to have numbered some 650, have been thrown down, broken up, or buried, by the rude forefathers of

the village which now straggles so picturesquely over the whole ground. But the great vallum still remains to all intents intact—a prodigious earthen wall rising 40 feet above the floor of its fosse, and measuring in its circuit 1,480 yards, or considerably over $\frac{3}{4}$ mile. It was probably the formidable character of this rampart which first tempted the intruding Saxons to make a settlement within its shelter, and for long centuries its value as a defence would tend to preserve it from destruction,

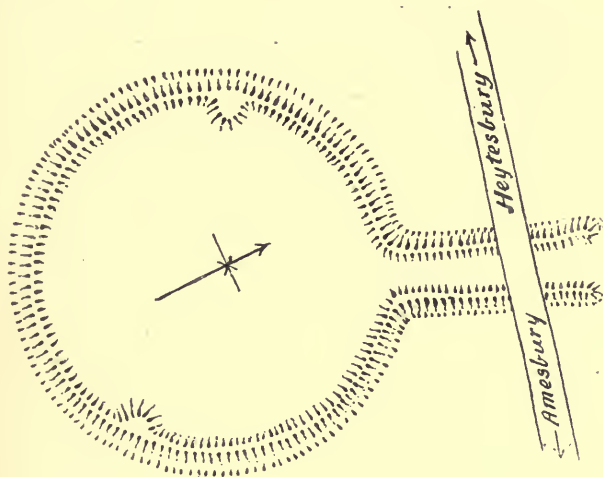


FIG. 188.—EARTHWORKS OF STONEHENGE.

whereas the great stones, useless for defence and in the way of the plough, were gradually removed. The space included within the vallum is a depressed circle of 1,200 feet from east to west, and 1,170 feet from north to south, or an area of $28\frac{3}{4}$ acres. The church, which embodies seraps of Saxon or of very early Norman date, lies not within the vallum, but immediately without it on the west. A mile to the south-south-east is the alleged barrow of Silbury Hill. Eighteen miles due south lies Stonehenge (Fig. 188), a mere dwarf in point of area

when compared with Avebury, and, moreover, probably of much later construction.¹

The point with which we are here concerned is that although Stonehenge, as the ruins of its contained circles show, is almost unquestionably a monument of the same class as Avebury, it does not show the same disposition of fosse and vallum. Vallum and fosse at Stonehenge—its diameter is but 300 feet—are both feeble, and they are arranged in the common way, the ditch without, the wall within. It follows that the reverse arrangement was not considered essential in religious earthworks. The plan of the entrance of Stonehenge is interesting: vallum and fosse are prolonged for a distance of some 200 feet on either hand of the gateway so as to form a narrow avenue—the so-called *Via Sacra*—pointing to the north-east.²

Five miles due north of Wells, on the top of the Mendips (918 feet), close to the Castle of Comfort Inn, where the high road to Bristol crosses the line of the old Roman road running north-westward towards Charterhouse, there lies immediately west of the high road a series of four circles (Fig. 189), all of one size, all of one plan, and all as mathematically exact as circles could well be when executed in such a soil and on such a scale.³ Although

¹ This is inferred from the fact that the stones of Avebury were, so far as is known, unhewn, whereas many of those of Stonehenge were evidently dressed (or redressed?) with tools of metal, notably the great trilithons with their mortises and tenons. Sir Norman Lockyer adduces evidence to show that the original work was at a subsequent date (about 1700 B.C.) remodelled and reconstructed for an altered form of worship. At the moment of writing Avebury is at last being explored. The great ditch has been opened to a depth of 17 feet, and lying upon its floor have been found the picks of deer-horn used (as at Grimes' Graves) by those who dug it. This evidence would seem to throw back the date of the monument at least to the early Bronze Age.

² Compare the arrangement of the entrance to Bat's Castle, Dunster, p. 198. The precise point to which the entrance of Stonehenge is directed is 25° E. of N.

³ It cannot be a mere accident that the four lie upon what is to all intents a dead level. The O.D. north and south shows a difference of no more than one foot.

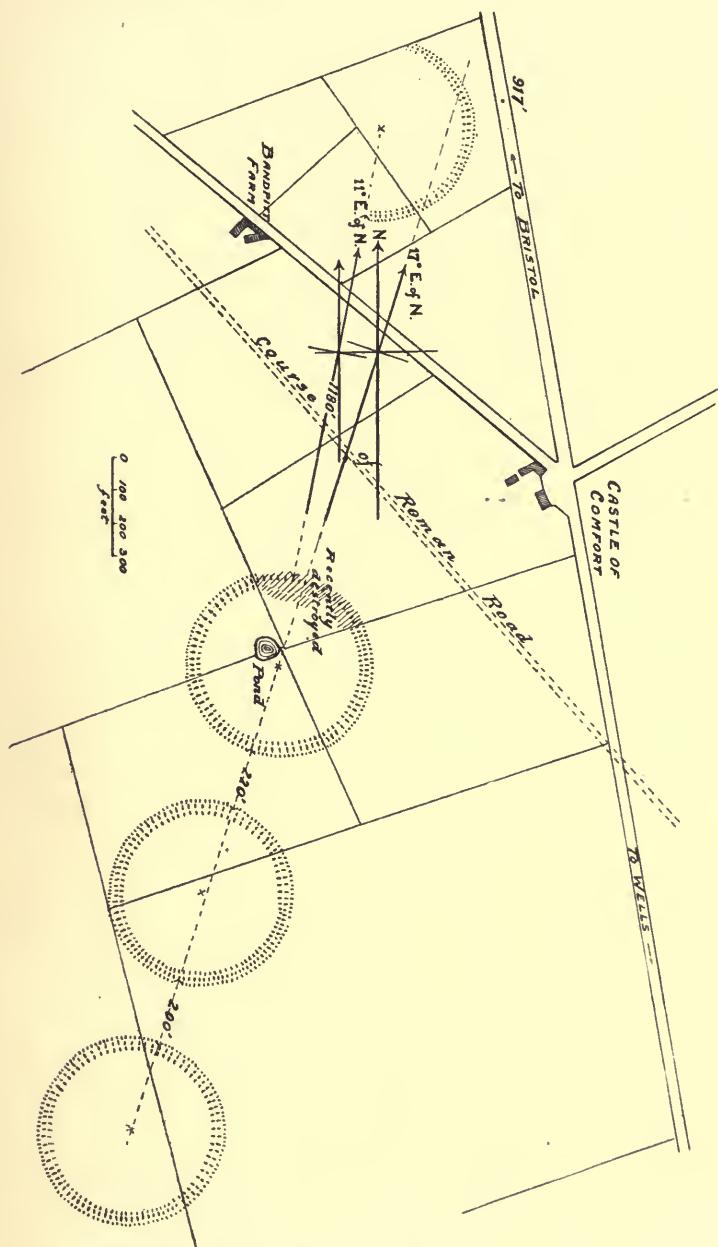


FIG. 189.—MENDIP RINGWORKS, PRIDDY.

they have suffered greatly from the mining operations which have scarred all the Mendips, as well as from the plough—one of the four is almost obliterated—they are still quite easy to make out. The diameter of each is some 550 feet within the area, which is surrounded by a broad low vallum, and that again by a correspondingly broad and shallow ditch. The height of the vallum above the ditch, where best observable, is some 5 feet. There are no determinable entrances. The most southerly of the group is about 250 feet away from the second; the second about 200 feet away from the third; and a line joining the centres of the first and third passes through the centre of the second also, and points 17° east of north. The fourth circle lies 1,200 feet away from the third, not in a right line with the others, but slightly to the west. Between the third and fourth circles passes the Roman road. Within the third circle is an old pond of some size.

With every appearance of being all of one date, and that a venerable one, these circles lack every characteristic of military works. Their peculiar disposition, their painstaking regularity, and their identity of size, all suggest that they must, if really old, be of ritual, and perhaps of astronomical character.

At Knowlton, in Dorsetshire, four miles south-west of Cranborne, is another group of earthworks of exceptional character. There are again four enclosures (Fig. 190), but irregular in size and in distribution, and three out of the four show the fosse within the vallum. The largest ring, now mostly destroyed, had an area of some 500 feet in diameter. The second lies about 450 feet north by west of it. Its inner area measures only 150 feet over, now occupied by the ruins of a church and its burial ground. Two hundred and fifty feet further to the north-north-west lay the remains of yet another, still smaller in size, and immediately south-west of this was a fourth, the smallest of

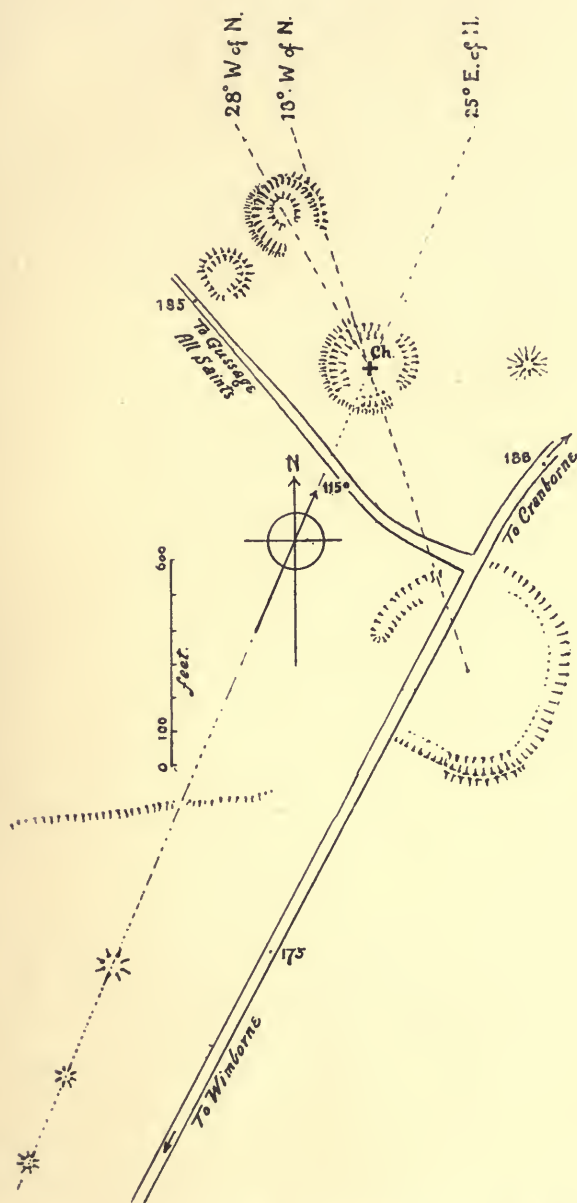


FIG. 190.—KNOWLTON.

all. The group is described by Warne in *Ancient Dorset*, and even when he wrote the two last mentioned were scarcely traceable. He describes the second, and best preserved work, as "strong and carefully constructed, with a kind of narrow terrace raised to near the summit of the rampart on the inner side, and a wide, shallow fosse within." He believed the original entrance to have been on the north-east side. When part of the ramparts of one of the rings was removed, there were found "without it," so it is said, "great quantities of human bones, with spear-heads and pieces of iron."¹

It does not seem possible to make anything of the seemingly haphazard disposition of these four works, but it is otherwise with some minor works in the locality. From east to west from the southern side of the largest ring runs an almost obliterated dyke, and south of this are three mounds in a row. A line joining the centres of the first and third mound passes through the centre of the other, and if projected, passes also through the centre of the second circle containing the ruined church. The direction of this line is 25° east of north, or precisely the same as that of Stonehenge. It is noticeable that the dyke before mentioned is broken at the spot where this line passes it. Three hundred feet directly east of the second circle stands another isolated mound, apparently a barrow of unusual size. The ground is nearly level, with a slight rise towards the north-east. Warne does not seem to have noticed the possible relation of the barrows to the other works, but he surmised that the rings may have been "hypæthral courts of judicature, or sanctuaries of Druidic worship." Had he written "astronomical" instead of "Druidic," his opinion would have perhaps earned more attention. He pointed out that there is no

¹ Hutchins, *Hist. Dorset*, iii., 150. One does not understand how these things could be found *without* the vallum, if they were found during its demolition.

stone in the neighbourhood of Knowlton,¹ and thought that these earthen rings were a local equivalent of the stone-circles of other districts.

Thornbrough Moor (or Carrs) is 5 miles north of Ripon and $3\frac{1}{2}$ miles due west of the great Roman North Road. Its name belies it, for it has for many years been under diligent cultivation, and its peculiar earthworks have suffered in proportion. These works are three. They are all of one plan (Fig. 191) and one size; they lie with their centres almost upon a right line pointing north-north-west,² all at one level (150 feet, O.D.), and almost equidistant one from another. Walking up from West Tanfield towards Thornbrough one passes just to the right (south) of the midmost of the three, its irregular remains scattered over a large grass-field. In plan it is a regular oval,³ 615 feet in length over all, surrounded by a single vallum of gravelly earth. The piecemeal demolition of the vallum, which has served as a quarry for the road-menders and gravel-diggers of many years, renders it impossible to say what was its original height and outline; but whereas it is in many parts reduced to a height of no more than 8 to 10 feet, in others it still rises to 20 and even 25 feet of vertical height. The driving of ploughs as closely as was permissible to the base-line has left it remarkably sharp and distinct, especially on the outer

¹ Knowlton is of sufficient antiquity to have given its name to one of the Hundreds of Dorsetshire. If the theory which regards these works as of ritual character be correct, the presence of the church within that one of the rings which would seem to have been the most important is interesting as an example of the reconsecration of a pagan site to the later religion.

² The actual point is 37° W. of N.

³ The works are incorrectly figured as exact circles. The exact measurements of the midmost work are 615 feet by 524 feet. It is impossible to measure the others accurately, the one because it is too much overgrown, the other because it is too much destroyed. For some details of these works see an article by C. W. Dymond in *Trans. Cumberland and Westmorland Soc.*, vol. xi., 1890. He gives the distance between the central and northern rings as 2,480 feet; between the central and southern rings as 2,380 feet.

face of the southern end of the work.¹ At either end of the enclosure is an entrance, *i.e.* a complete gap in the ceinture, where no vallum ever existed: that to the south measures 52 feet across, the vallum on either side being 55 feet wide at the base. The northern entrance is slightly wider, about 56 feet in all, the thickness of

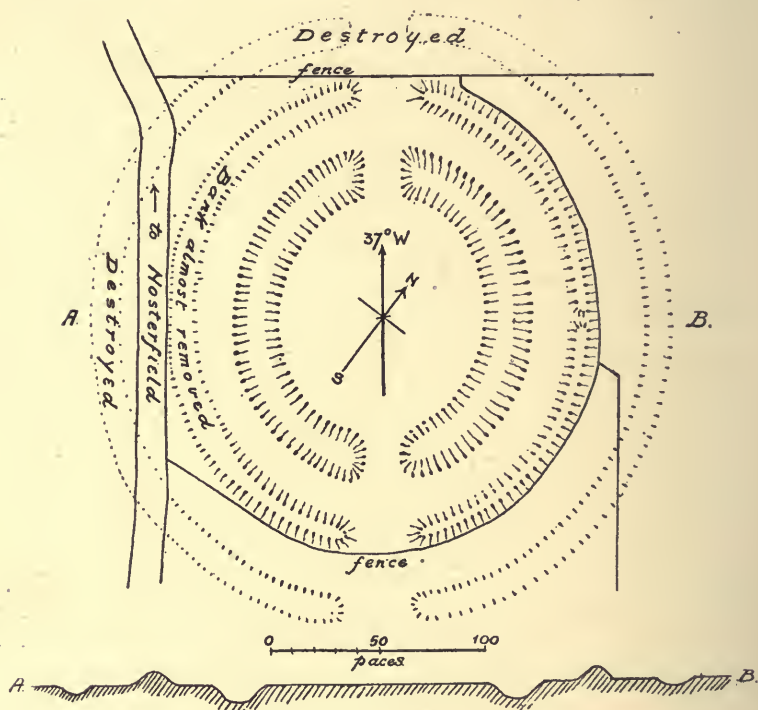


FIG. 191.—THORNBROUGH, THE NORTHERN RING.

the vallum being unaltered. The area at first sight appears to be undisturbed, but a closer inspection shows that it once had a broad fosse following the elliptical course of the vallum, with wide breaks to north and south corresponding to the entrances. Where it is deepest

¹ An old map of the eighteenth century shows the area divided up into common-fields.

this fosse is now no more than three feet, and the width is as much as 110 feet, but repeated ploughing has quite altered its original measurements. Between the fosse and the vallum runs a broad level berm. A shallow depression curving round the north-west face of the whole work, 18 paces away from the vallum's foot, is all that remains of an outer fosse.

The second and most northerly of this group of works has been planted with wood, which has saved it from the plough, if it has rendered difficult any accurate measurement, but the latter drawback is more than compensated by the former gain. The high road to Nosterfield has encroached upon the western side of the enclosing vallum, and much material has been removed from this part, but the great fosse, the central area, and the whole of the eastward half of the vallum remain practically intact, enabling one to realize what was the original appearance of all three works. The vallum has a height of from 15 to 20 feet. The berm has a regular width of 45 feet, and the fosse is still as much as 20 feet in depth, with a width from lip to lip of 66 feet. The "island," measuring 110 paces by 90 paces, is now perfectly flat and unbroken. As in the case of the work first described, the two entrances differ in size: that to the north is 54 feet across, that to the south 36 feet. The total periphery measured along the ridge of the vallum is some 520 paces. At the central point of the eastern half of the vallum is a slight depression which may or may not be original. Round the whole of the eastern and southern sides is traceable an outer fosse, now a mere dip in the ground, nowhere falling more than 3 feet below the general level. Its present width is about 14 paces, and the berm dividing it from the foot of the vallum is 18 paces wide. It can never, therefore, have reached the proportions of the inner fosse. It is interrupted at the southern end, immediately opposite the

entrance to the ring. On the north and west all trace of it has disappeared.

The third of these strange works, and the most southerly, is the least well preserved of all. About three-fourths of the vallum are still traceable, including the two entrances, which are disposed exactly as in the others; but of the great inner fosse there remains scarcely a vestige, the plough having filled it in almost entirely, leaving only a gentle convexity of the inner area to show that this too was planned exactly as were the others. The outer fosse is still less apparent. One could not desire a more striking illustration of the destructive power of the plough. The diagram (Fig. 192) shows the sections of the central work and of the best preserved

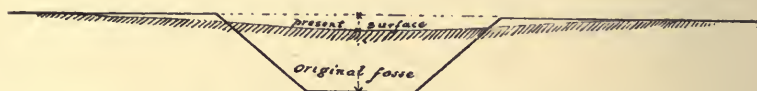


FIG. 192.—SECTION OF FOSSES, THORNBROUGH.

illustrating the manner in which the process of destruction, while it has filled up the fosse, has increased its apparent width.¹

There existed until lately two precisely similar works on Hutton Moor,² 3 miles east of Ripon. Of these one is now quite obliterated, and the other, which lies near the farm-

¹ Probably the bulk of the surrounding vallum has in this case been thrown back into the fosses to level them up. The writer has seen a number of stone implements said to have been found in one or other of the Thornbrough works about 100 years ago. Amongst them were an exceptionally fine gouge of hard black basaltic stone with a high polish; a square-edged chisel of the same stone, $2\frac{1}{2}$ inches wide, also partially polished; an unpolished dagger of chert, $5\frac{1}{2}$ inches long; and a very finely worked leaf-shaped arrow-head of honey-coloured flint, 2 inches long. The basaltic implements are of types more commonly seen in the Pacific Islands, but both these and the unpolished dagger have analogies amongst the stone implements of Denmark and Ireland.

² Hutton Moor lies within the Hundred of Halikeld, *i.g.* Holy Well, so named from a spring rising a mile to the north.

stead called Blois Hall, is rapidly disappearing. The two sites lie 5,600 feet apart, and the line joining their centres points slightly west of north,¹ but not so much to the west as in the case of the works at Thornbrough. Exactly on this line lie two tumuli, and there used to be until lately as many as eight in the immediate vicinity. The remaining earthwork² measures about 650 feet over all, *i.e.* must originally have been of dimensions to all intents the same as those of the Thornbrough works.

If the peculiar disposition of the vallum and fosses in these works were not in itself sufficient to prove that they were not designed for military purposes, the further facts that they are arranged in groups, with definite intervals between one and the other, along lines pointing to determinate points of the compass, must complete the proof. Like the simple rings on Mendip, and the works at Knowlton, those at Thornbrough may conceivably have had some astronomical, *i.e.* ritual purpose. It may be added that nearly midway between the central and the southern rings at Thornbrough, and on the same right

¹ Approximately 25° west of north. This work stands at an elevation of 175 feet, the other at nearly 200 feet.

² Raised upon what remains of the vallum of this work, respectively at the northern and southern points, are two stone-built constructions of conical shape, about 15 feet in height, crowned with acorn-shaped finials. Walbran records their restoration about a century ago—one of them bears the date 1804—and they have more recently been repaired by the Marquis of Ripon. Local belief will have it that they are of Roman date, and that there was once a third. An attempt has been made to prove these “pyramids,” and the earthwork on which they stand, to be of one age, and to have been associated with some form of phallic worship; but it is obvious that the “pyramids” can only have been built after the vallum of the earthwork had been almost levelled. Probably they are “folies” of the classical eighteenth century. In Ripon Museum is a small polished stone axe found on Hutton Moor, and two exceptionally fine axes, one polished and the other in the rough, fully a foot long, which were both found at Hutton Conyers close by. The writer picked up a number of neolithic scrapers, flakes and chips, within 20 yards of the work, and one very small arrow-head of diamond shape (1907).

line, is a large barrow, "Centre Hill," now all but ploughed out. From its position one is tempted to conjecture that it may have been placed there for the purposes of sighting, but Mr. Lukis, who excavated it, found it to contain an interment. The body, which was accompanied by rudely chipped flints, had apparently been buried in a log coffin. Pennant remarked no less than four barrows in a right line between two of the great ring-works. These have now disappeared, but there are remains of one somewhat west of south from the central ring; remains of another—called "Three Hills," because there were anciently three in a group, all containing burnt interments—east of the northern ring; and yet another at 500 yards east-south-east of the southern ring.

Stukeley was of opinion that works of this type were constructed for games, and gives a quaint plate of the example near Penrith (see below) with chariots racing about it, labelling it "Circus of the Ancient Britons." Pennant at first imagined them to have been tilting-grounds, the two entrances being intended for the entry of the opposing horsemen, but later he concluded, on the authority of a passage in Saxo Grammaticus, that they were duelling-grounds built for the settlement of the differences of exalted personages. Yet another view regards them as moots, but this in no way explains their extraordinary plan: the fosse would be decidedly in the way, one would think, and quite unnecessarily wide and deep; while the peculiar disposition of the several ring-works, and their number, are further difficulties. But they may have been used as moots in later days. In the fourteenth century occurs a reference to "their court at Thornbergh," held by the Marmions, lords of Tanfield. The rings might very well be selected as a convenient and well-known rendezvous, just as were Badbury Rings certainly and Desborough Castle probably. C. W. Dymond seems inclined to attribute them to a comparatively recent

date, and remarks especially upon the "new look" of the example near Penrith. The generality of modern authorities appear, however, to incline to the belief that all works of this type were originally sepulchral, and if the colossal dimensions of the Thornbrough works be advanced as an objection, they meet it with the reply that Avebury itself, a yet more enormous monument, was originally sepulchral. It may be so, but until scientific excavation has attempted to solve the problem, it must remain matter of debate. If such things be really only graves, then must those who were buried here have been indeed mighty ones of the earth, and one would fain know their names and their titles to such gigantic memorials. For be their purpose what it may, to one who fairly estimates their mutilated remains the three Thornbrough Rings are collectively a monument as impressive as Stonehenge itself. They were obviously the work of one people, planned and executed according to one definite scheme; and when one tries to realize the labour involved in making one such work only, one must needs feel a new admiration for the unknown men who designed them and wrought them. They bespeak a state of society in which organized effort on a vast scale was no rarity—a society in which the sentiment which urged men from within, or the force which compelled them from without, or both sentiment and force combined, were fully as strong and effective as any religion or any law of to-day. And force and sentiment were guided by a knowledge which was competent to take accurate levels over areas of a mile or more, to make exact surveys of distances, to achieve nice alignment, and to ensure practical identity of measurements in the material least amenable to exact treatment. The men who designed and built the "Rings" knew what they were doing, and though to us the purpose of the thing they built may be as yet a mystery, there can be no question that to them it was a clear means to a certain

end, and the best means then attainable, no fanciful expenditure of vast energies without a meaning. It was reserved for the builder of the "Pyramids" on Hutton Moor to exemplify the latter fatuity, and to rear his objectless follies upon the purposeful monuments of a forgotten race of "savages."

The works at Knowlton, at Thornbrough, and at Hutton Moor have in common the fact that they are all in groups. "Arthur's Round Table," at Eamont Bridge, Penrith, while otherwise exactly following the plan seen at Thornbrough, is very much smaller, and was perhaps a solitary work of its kind.¹ In Wiltshire also is a solitary example of something very similar in Figsbury Camp (Fig. 193), 4 miles north-east of Salisbury, otherwise styled Chlorus' Camp.² This is an oval entrenchment of

¹ It is figured in Fergusson's *Ancient Stone Monuments*, p. 129, and discussed by C. W. Dymond in *Trans. Cumb. and West. Soc.*, vol. xi. (1890). It measures 300 feet over all, and 175 feet across the island. Its two entrances are disposed north-west and south-east, exactly as at Thornbrough and Hutton Moor, but it is much less regular in plan, the berm varying in width from 6 feet to 20 feet. The ditch has an average width at the top of 43·17 feet, and an average depth of 5·07 feet. It is not certain that it was originally a solitary work, for there used to be another earthwork ("The Little Round Table"), of the same shape and the same dimensions, 125 yards to the south. Even in Stukeley's time it was almost effaced, and has now entirely disappeared, so that it is impossible to say whether its *plan* also was the same. Stukeley, indeed, says positively that its ditch was outside the vallum, but he may easily have been mistaken, and his plate of the "Round Table" shows that he was inaccurate, for it shows no berm. At the present time there is a small circular platform about 1 foot high and 30 feet to 40 feet over, in the centre of the island of the Round Table. This may possibly be the remains of a barrow, but on the other hand it may not be an original work. Pennant states that the earthwork was used in his time for sports, and the circular platform strongly suggests a later-day provision for the favourite Cumberland sport of cock-fighting. Four hundred yards west of the Round Table is Mayborough, a very large ring-work surrounding a solitary monolith.

² Stukeley adopted this name from earlier writers. It is found as early as Kennett's *Parochial Antiquities*, 1695; and the method of arriving at it is a good instance of the worthlessness of much so-called archæology. There was a person named Constantius Chlorus, who fought and overthrew the usurper Allectus in 298 A.D. West of Figsbury is Clarendon Park, and at Old Sarum Constantiūs was said to have had his headquarters. This

15 acres, the longer axis lying east and west, enclosed within a single huge rampart 46 feet high, with the customary outer fosse, and two entrances pointing to the east and the south-west. Within the vallum is a wide berm, and beyond this another deep fosse, without parapets, parallel with the vallum and interrupted, exactly as at Thornbrough, opposite the two main

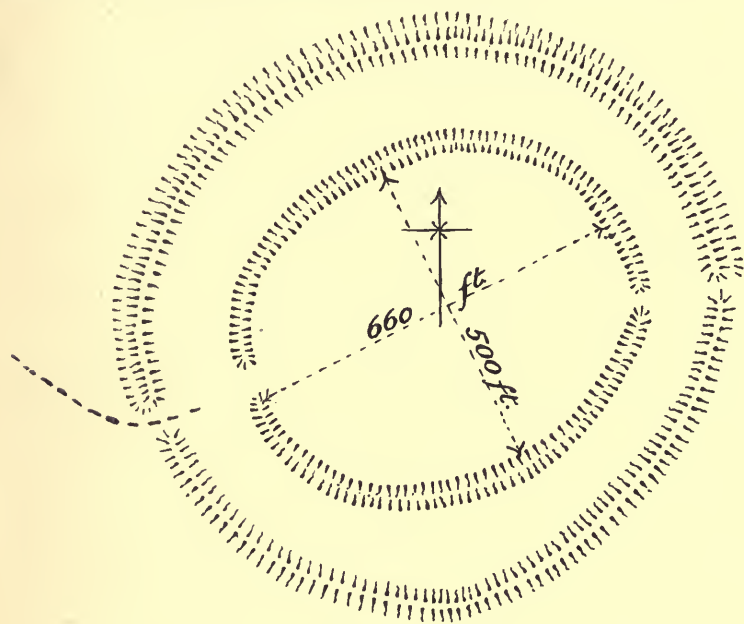


FIG. 193.—FIGSBURY.

entrances. As examples of the resource of bygone antiquaries may be quoted the theories of two of them: Stukeley tried to account for the exceptional disposition of the works by supposing that the occupants of an earlier and smaller camp removed its vallum bodily and set it forward where now it stands, leaving the original ditch untouched; and Sir R. Colt Hoare, while rejecting

suggested that Clarendon was connected with Chlorus. The camp, therefore, near Clarendon must be Chlorus' work. Therefore Figsbury was Chlorus' Camp. *Q.E.D.*

this notion, could only suggest that the inner fosse was formed in digging extra material wherewith to heighten the existing rampart! ¹

At wide intervals are found other works of more or less "religious" pattern. Between Hartington and Youlgrave,

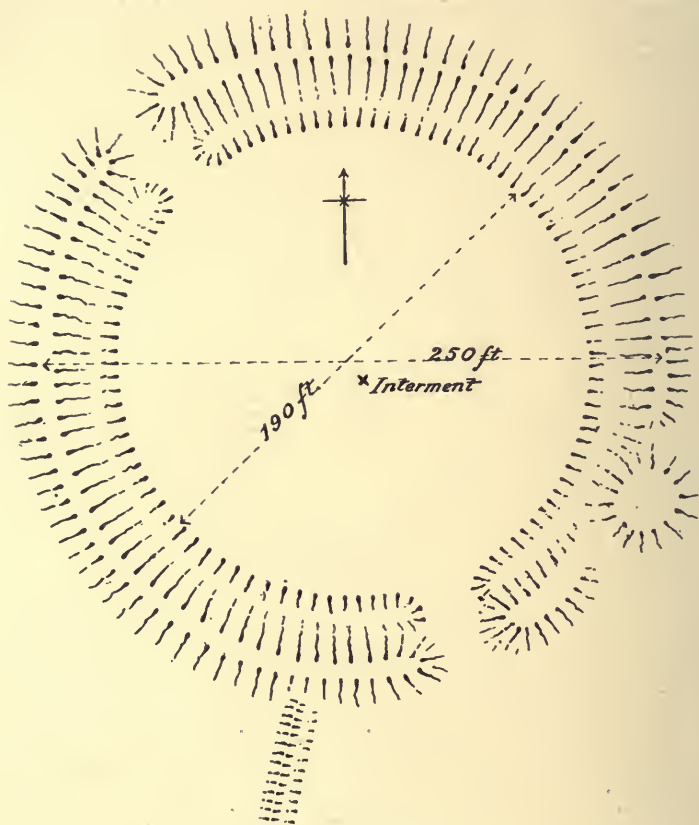


FIG. 194.—ARBOR LOW.

Derbyshire, is the well-known example called Arbor Low. Its plan (Fig. 194) is to all intents an exact circle 250 feet in diameter, the containing vallum rising 7 feet above the ground without and 6 feet above the inner area. Within it is a circular fosse $5\frac{1}{2}$ feet deep, sur-

¹ *Ancient Wiltshire*, i., 218.

rounding an island of 190 feet in diameter, upon which stand or lie the remains of a peristalith. There is no berm and no outer fosse. The two entrances lie at the south-east and the north-west. The site was explored by Mr. St. George Gray¹ in 1901-2, whose conclusions were that it was a work of the Later Neolithic Age, but antedating the Bronze Age,² that it was not intended as a place of habitation, and that, albeit interments were found within it, it did not "appear to have been a place of sepulture at a period closely following its construction."³ Not unlike this is Castle Dyke, near Aysgarth (Fig. 195), where a weak vallum of earth encloses a perfectly regular oval area measuring from crest to crest of the vallum 257 feet (east to west) by 217 feet (north to south). Immediately within the vallum is a broad fosse varying from 25 to 32 feet in width. The vallum at its highest (east) rises not more than seven feet above the floor of the fosse. The "island" measures 196 by 160 feet, and is perfectly flat. There is no berm and no outer fosse. The vallum is broken by three gaps, of which that to the south-east is apparently original, as the fosse has never been excavated across it. The other gaps point respectively north-east and south-south-west, the latter being a mere depression like that to be seen at the eastern side of the northern ring at Thornbrough. At one point in the vallum, on the

¹ *Archæologia*, lviii., p. 462. Near Chapel-en-le-Frith, in the same county, is another very similar work known as the "Bull Ring." At Marden, between Pewsey and Devizes, is a third of less regular plan, within the area of which stood two barrows.

² Abutting upon it at the south-east is a tumulus, which was found to be of the Bronze Age, and "undoubtedly constructed of materials derived from the original" rampart of Arbor Low. The latter work yielded no traces either of metal or of pottery.

³ According to another view the work is simply a barrow, and there once stood within the island a cromlech of the recognized sepulchral type. A human skeleton, without any furniture to indicate its age, was found close to the centre of the island.

south-east, a single large stone rises slightly above the turf which otherwise covers the whole work, and certain depressions observable at other points suggest that other such blocks have been removed—that, in fact, it originally had a peristalith standing upon the vallum. The principal entrance looks towards Pen Hill (1,792 feet), the highest point within view, and there are no traces of any

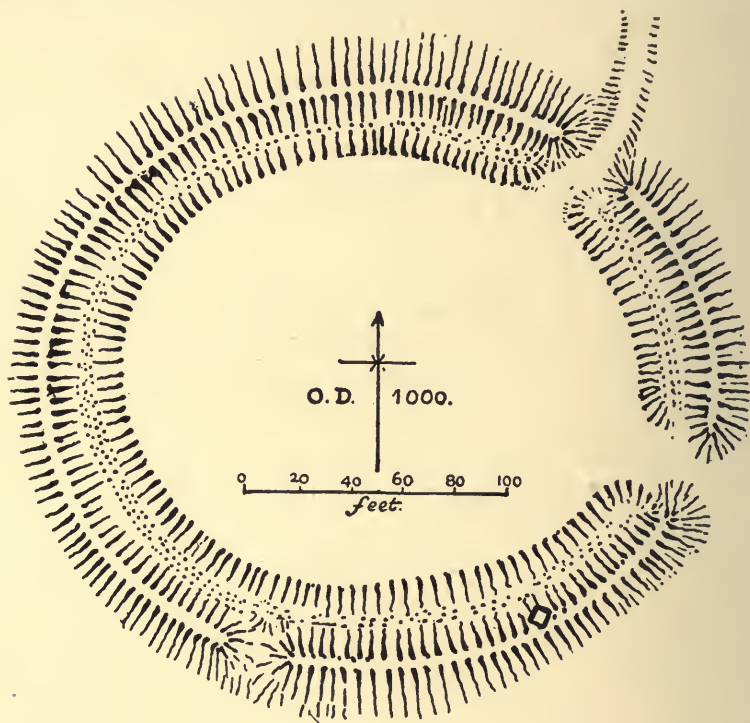


FIG. 195.—CASTLE DYKE, AYSGARTH.

other works in the vicinity. Voley Castle, near Parracombe, Devon (Fig. 196), resembles this work in general plan, but it is less regular, and has moreover a pronounced outer fosse.

On Cottley Hill, near Warminster, was a ring with a diameter of 480 feet (*i.e.* an area of $3\frac{1}{2}$ acres), having the fosse within the vallum. There was a tumulus at the

centre, and the whole was probably an unusually large disc-barrow. One to the north of Battlesbury Camp, also near Warminster, had a diameter of 200 feet, with entrances to the south-east and the west. All these are alike in having but a single vallum. "Robin Hood's Ball," near Casterley, is exceptional: it shows two concentric circular valla, with an entrance on the north side, and no fosse at all.

In yet other examples the interior fosse is found surrounding an area of more or less correctly rectangular

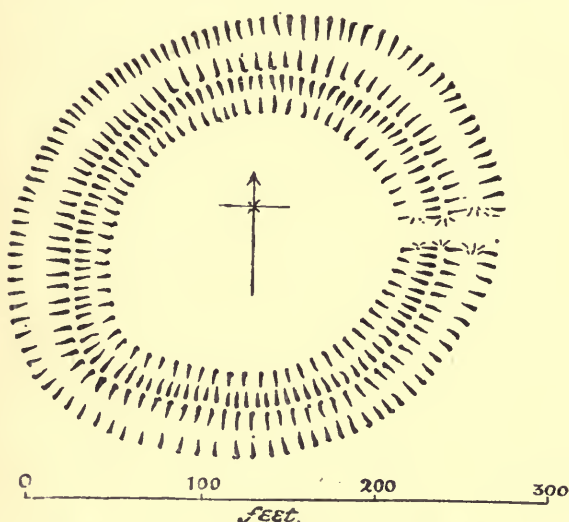


FIG. 196.—VOLEY CASTLE, PARRACOMBE.

plan. Some Wiltshire examples of this design have been already mentioned (p. 145), and speaking of a similar work at Staddon Hoe, near Buxton, which measured only 100 feet each way, Stukeley says it was "much of the nature of those which in Anglesey and Wiltshire we call Druids' Houses." They are decidedly unusual at the present day. One example (Fig. 197) in Northumberland, upon the banks of the North Tyne, $1\frac{1}{4}$ miles south-east of Plashetts station, has an island measuring 150 feet by 110 feet, but only by courtesy to be called rectangular.

Another on Ampleforth Moor, Yorkshire N.R., known as Studfold Ring (Fig. 198), more nearly approaches a

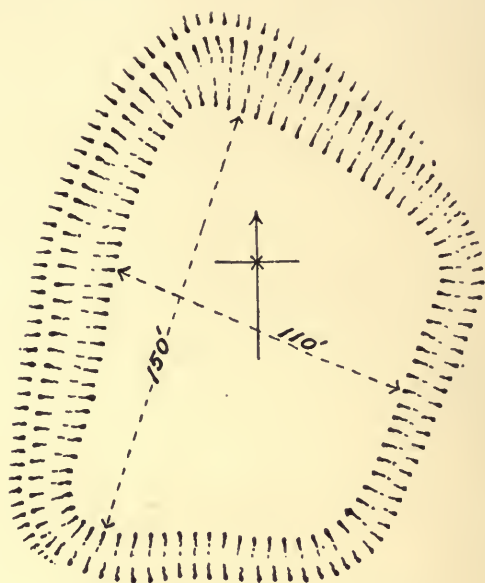


FIG. 197.—EARTHWORK AT PLASHETTS

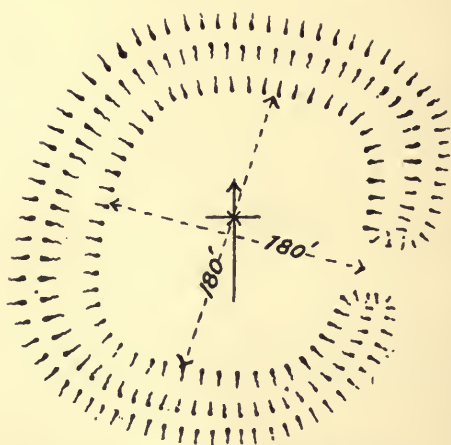


FIG. 198.—STUDFOLD RING, AMPLEFORTH.

regular square of 280 feet over all with boldly rounded corners, its single entrance facing to the east, and the

island having an extreme measure of 180 feet either way, or an area of three-quarters of an acre.

It is generally surmised that works of this kind, whatever their shape, were originally of sepulchral character, and this view finds support in the fact that within some of them barrows still exist, or are known to have existed.

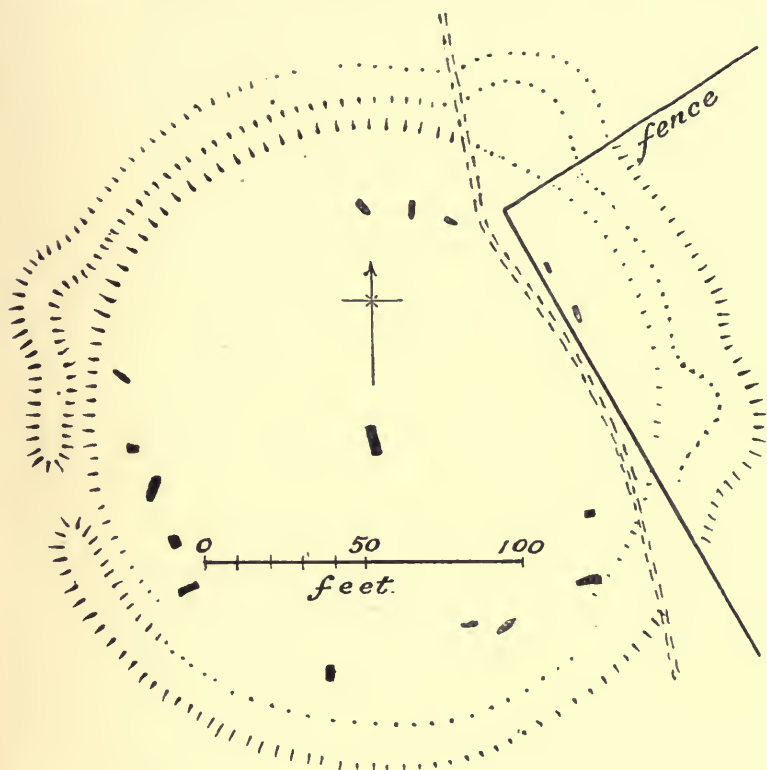


FIG. 199.—STRIPPLE STONES.

Nevertheless the surmise still awaits the proof of excavation. In the meantime they may be called either sepulchral or religious, the tomb and the temple being as a rule one and the same amongst primitive peoples.

Unique apparently amongst English earthworks is the megalithic circle near Blisland, Cornwall, known as the Striple Stones (Fig. 199). Here the circular island, 178

feet in diameter, is partly ringed with a fosse 10 feet broad, beyond which lies a vallum of the like breadth; but both fosse and vallum are thrown out to form three semicircular processes, the purpose of which is entirely unknown. Although the work has been very nearly destroyed, enough remains to show that these processes were three in number only.¹

At Burrington, Somerset, is a very curious work (Fig. 200), apparently a hybrid between the "military" and the "ritual" methods of construction. It occupies a gently sloping site on the eastern edge of the precipitous gorge of Burrington Combe. The main line of defence consists of a massive rampart of earth and stone bending sharply at the south-eastern angle, but otherwise rectilinear. The southern portion of this rampart runs up to the edge of the cliff;² the eastern part, broken for a distance of 20 paces by an entrance at D, is continued in a very much weaker form northwards until it disappears on the slope of the hill. It is covered throughout by a fosse of normal character, which is in places as much as 20 feet across, and at A, where it is highest, the vallum rises fully 15 feet above the natural surface. Within this rampart, and without any intervening berm, is a second fosse enclosing an ovoid area about 350 feet

¹ As the result of some partial explorations of the Stripples Stones, Mr. St. George Gray believes that the fosse and vallum were never carried round the southern (lower) side of the island, whereas they are very conspicuous on the northern (higher) side. He suggests, therefore, that the purpose of both was simply to keep the island clear of water. This explanation may be admissible in this case (although it does not account for the peculiar processes above described), but it will not fit other cases, *e.g.* Castle Dyke, Aysgarth, and the works at Thornbrough and Hutton Moor. As regard "finds" which might throw light upon the age and purpose of the Stripples Stones, the discoveries were as negative here as they have been at other spots of the kind.

² Under the cliff, here 250 feet high, are many caves, in one of which, known as Aveline's Hole, were discovered some fifty skeletons laid in niches, together with flint-knives, bones of animals, &c. The cave is now blocked up.

long and 275 feet wide, interrupted at C by a second entrance. On the inner edge of this fosse there is no trace of any vallum except at the south-western corner, where it is only very slight; but another slight vallum, commencing at this point, follows the outer edge of the fosse round to the entrance C, which it envelops. This

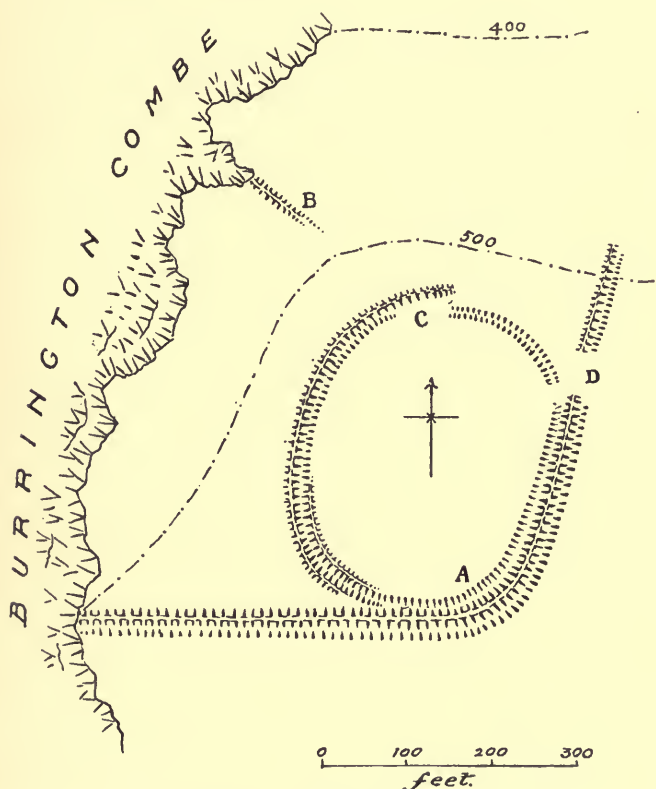


FIG. 200.—BURRINGTON CAMP.

is resumed beyond the entrance and is carried in a somewhat bolder form along the edge of the fosse to D. At B are some slight traces of another bank running from the cliff to the enceinte. Collinson was so perplexed by the oddity of the whole work that he opined it to be "Druidical," and to have some unexplained connexion

with the well-known stone circles at Stanton Drew, 8 miles to the north-east.

The camp, which stands at an elevation of 500 feet, is overlooked by a craggy height immediately to the south-east, and the high ground beyond the combe to the west shuts out any view of the splendid fortress of Dolebury, less than 2 miles away; but there is a fine outlook over the newly made Blagdon Reservoir, up the valley of the Chew, and across the Vale of Wrington to the Severn Sea. Along the edge of the cliff southwards are to be found flint flakes in some quantity, a rarity in this limestone region.

Warne's description of the second ring at Knowlton, as being provided with a kind of terrace within the vallum, certainly suggests that it was intended for the accommodation of some sort of audience, whatever the nature of the function at which they might be assisting. Of several such terraced rings the best known example is that at Dorchester, variously styled Maumbury¹ Rings, or the Roman Amphitheatre, 400 yards south-west of the town on the Weymouth road (Fig. 201).

Considering the size of this earthwork it is almost incredible that it passed quite unnoticed by antiquaries until attention was drawn to it by Sir C. Wren. When Stukeley described it in 1723 it was already a cornfield, and worse threatened it when the railway approached Dorchester, for the engineers proposed to carry their line right across it, and were only dissuaded therefrom by the efforts of Warne. Curiously regular in design, it was formed by excavating an oval basin in the soil to one

¹ One derivation of the name connects it with "malm," a local word for chalk, so that "Maumbury" would have the same meaning as Chalbury (A.-S., *cealh*, "chalk"), a well-known fortress near Weymouth. Another theory would connect it with *maen*, "stone." Yet a third suggestion connects it with the old-English *mummer*, *munmery*, *maumetry*, *maumet*, and sees an allusion to the use to which the Rings are supposed to have been put.

uniform depth of ten feet, the material thus removed being thrown up in a huge *agger* with entrances at the north-east and south-west, *i.e.* at the ends of the major axis.¹ The dimensions of the area are variously given as 220 by 140 feet, and 218 by 163 feet. The *agger* is highest at the central point of each side, where the

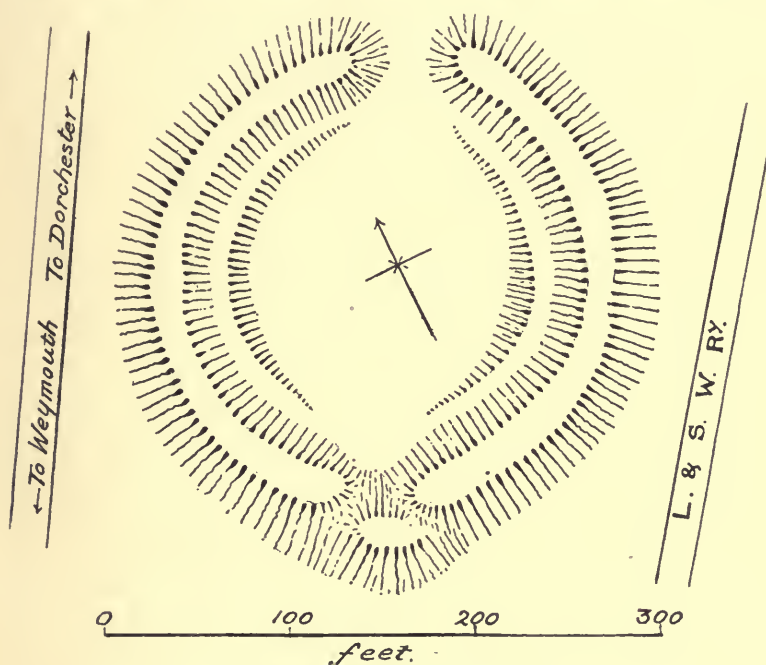


FIG. 201.—MAUMBURY RINGS.

vertical height is given as 35 feet, the slope on the outer side being 35 feet, and that on the inner side

¹ The south-western entrance has been blocked up by a bastion-like construction, possibly a work of the days of the Civil War, when the Parliamentarians are known to have occupied the Rings. In Stukeley's elaborate but imaginative plates it is shown as something which may well have been intended for a gun-platform. Warne's plan (*Ancient Dorset*) shows further a somewhat similar but smaller platform at the central point of each side of the containing vallum. These also may have had the same origin and purpose, and to the same date may belong the slight parapet which he shows as topping the vallum.

to the floor of the arena 55 feet. From this highest point the *agger* trends gently downwards towards either end of the enclosure. There is no external fosse. From the level of the arena springs on either side of the entrances a sort of terrace, some 12 feet wide, which follows the line of the inner face of the *agger*, rising gradually with it to the highest point and thence falling as gradually to the floor again.¹ The imagination of some generations has exercised itself in trying to fit in the details of the work with what is known of the arrangements of Roman amphitheatres—to identify the Prætor's box, the seats of the lesser notables, and the dens of the wild beasts.²

The fact is that amphitheatres, with their implication of butchery, are as much an obsession with the multitude as are the Druids with their supposed unholy rites. Antiquaries of repute have gone out of their way to voice the totally unwarranted assertion that "every Roman town in Britain had its amphitheatre."³ As well expect every petty town of India to boast an English-

¹ In his drawing of the amphitheatre at Silchester Stukeley shows exactly the same kind of inner terrace, but no visible trace of it remains to-day. Stukeley's plates, however, are not very reliable. In his text, for example, he says that the Silchester amphitheatre has but one entrance, and that at the point (N.E.) furthest from the town; but his plate shows two entrances of equal dignity. In his day the arena was a cattle-pond, as he remarks: his plate shows two gentlemen of the period industriously fishing in it!

² As the Dorset Antiquarian Field Club and the British Archaeological Association have agreed jointly to examine Maumbury Rings, it is to be hoped that the question of its age and purpose may be at length finally decided.

³ When one comes to examine the facts one is struck by the decided rarity of permanent amphitheatres, not in the provinces of Rome only, but in the homeland of Italy itself. Exclusive of the famous Coliseum of Rome, Italy has remaining but four mason-built amphitheatres of importance, viz. those at Verona, Capua, Pæstum, and Pompeii. There are several in Sicily, a fine one at Pola in Istria; Southern France has three, viz. at Fréjus, Arles, and Nîmes; and in Northern France there are considerable remains at Lillebonne. At Rome is also the so-called *Amphitheatrum Castrense*, built of brick.

built theatre! If amphitheatres of masonry were not very numerous even in the Romans' own country, it is reasonable to suppose that they would become rarer as the distance from Rome becomes greater. Tacitus, who lived to see the Flavian Coliseum built, is authority for the assertion that there was a feeling against building such permanent inducements to idleness, and incidentally he tells us that the ordinary Italian town was content to make shift on occasion with temporary constructions of wood. Juvenal, his contemporary, declares that such smaller towns as possessed *theatres* (not amphitheatres) commonly allowed them to become grass-grown from little use.¹ Yet Juvenal lived through the days of the greatest of the Emperor-builders.

There is therefore reason to doubt whether Britain boasted so many amphitheatres after all, and when one comes to examine the list even of those only alleged to exist, it scarcely bears out the broad general-

ization that every Roman station had its own. There was one at Silchester (Fig. 202), but it has never been excavated: it measures about 200 feet by 190 feet, and is made of the natural soil. There was another at Richborough, Kent: it measured about the same, had a depth of $11\frac{1}{2}$ feet, and was built of masonry. There are said, on various authority, to be remains of others at Colchester, Caerlleon, Cirencester, Aldborough (Yorks), and Boreovicus

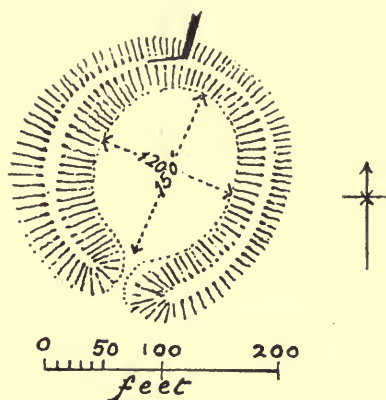


FIG. 202. — AMPHITHEATRE, SIL-
CHESTER.

¹ Satire iii., 173. According to another interpretation Juvenal is speaking of a theatre "made of turves." Says Gifford: "There is no country on earth where there are so many of those turfy theatres as in modern Italy." If this be the correct interpretation, it but strengthens the argument.

on the Wall; but of these only the case of Cirencester seems to be above suspicion, and that at Caerlleon probable. The so-called amphitheatre of Colchester has been suspected to be a mediæval maze; that of Borcovicus may have been a quarry.¹ That at Caerlleon, called the Round Table, stands in a field known by the suggestive name of the Bear-house Field; but while it may not be anything but a mediæval baiting-ring, on the other hand it may be a genuine Roman amphitheatre put to the use of bear-baiting in subsequent times. The work at Dorchester² has passed almost without challenge as an amphitheatre. So has that at Charterhouse-on-Mendip, to be described below. And the determination to find amphitheatres all over the map has led to their being claimed for places as far apart as Mark Inch in Fifeshire, and Redruth and Gwennap in Cornwall, although both these counties were regions which the Romans never occupied. As a matter of fact, the so-called Cornish amphitheatres are for the most part mediæval works, and that at Gwennap was made about 1803 to accommodate miners who attended Wesleyan preachings! In plain truth, any convenient hollow in the ground has been fixed upon by irresponsible visionaries as an amphitheatre. The case of Ham Hill (p. 93) is in point—a miserable pit big enough for a cockpit or a prize-fight, but for nothing else. It is not at all unlikely that several of the alleged Roman amphitheatres were actually built in mediæval times as bull-rings or badger-pits, and that a good many more are simply the grass-grown sites of stone-pits or other quarries.

Maumbury is different. It is amply large for the

¹ It is figured in the *Handbook of the Roman Wall* (J. C. Bruce), p. 138. It is, of course, quite possible that a quarry-hole of convenient character may have been actually used by Romans or Romano-Britons for purposes of sport, but even so, to call such holes by the name of amphitheatres is misleading.

² To the south of the other Dorchester (in Oxfordshire) a circular field has been supposed to preserve the figure of yet another amphitheatre.

purpose postulated, so large indeed that one doubts whether Durnovaria (Dorchester) could ever have mustered population enough to justify the building of such a work ; and its proportions are fairly in accord with those of other indubitable amphitheatres.¹ But it is quite possible that, although used by the Romans for the purposes of sport, it was originally erected at an earlier date and with a different object.²

Charterhouse-on-Mendip takes its name from the fact that the Carthusian monks of Witham once enjoyed the right of pasturing their cattle there. Within the parish are the remains of old lead-mines which are known to have been worked in Roman times. The outlines of a Roman station were traceable some few years ago, and the usual relics—coins, *fibulae*, and pottery—used to be abundant. Half a mile north-west of the station there stands on the side of the hill an earthwork of peculiar character (Fig. 203), which has passed unquestioned for an amphitheatre since it was so styled by the late Prebendary Scarth in 1858.³ It

¹ Appended are the measurements of some of the more imposing amphitheatres. The figure in brackets is the proportionate length of the major axis, the minor being taken as 100.

Coliseum, 250' × 150' (166).

Verona, 246' × 144' (170).

Arles, 226' × 129' (175).

Nîmes, 226' × 126' (179).

Amphitheatrum Castrense, 171' × 147' (116).

With these compare

Maumbury Rings, 220' × 140' (157).

It is calculated that Maumbury might accommodate some 10,000 persons.

² It is a curious fact that the amphitheatres at Dorchester and at Silchester, other similarities apart, are oriented to almost the same point, and that point almost identical with that of Stonehenge. Hutchins asserts of Maumbury, on the authority of Roger Gale, that a large stone lay in the entrance-way in 1719, which at once recalls the stone called the Friar's Heel at Stonehenge.

³ See *Archeol. Journal*, vol. xvi., p. 153. He seems indeed to have seen *two* amphitheatres here, which only makes the matter doubly marvellous. "At Charterhouse," he wrote, "is a perfect amphitheatre. It was ploughed over, but the form of it remains and the entrances are quite distinct. . . .

is a small oval pit, its floor perhaps 6 feet below the natural surface. Banked up about this pit the excavated material forms an irregular vallum of lozenge-shaped plan,¹ and of great thickness, rising at most some 10 feet above the surrounding ground. The vallum is at its highest at either end of the major axis, which lies exactly east and west; at the northern and southern points it is considerably lower. At

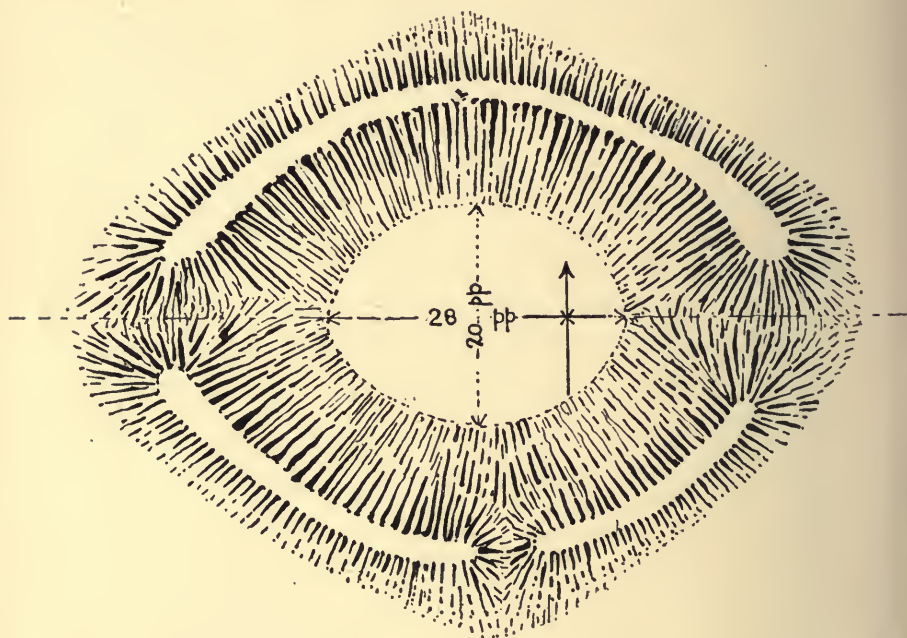


FIG. 203.—AMPHITHEATRE, CHARTERHOUSE.

each end is a gap or entrance, that on the east being the more pronounced: it cuts the vallum right down to

The farmer pointed out the site of another amphitheatre about $\frac{1}{2}$ mile distant to the south. . . . Sir R. Colt Hoare speaks of one which he says has been destroyed, but this is probably the one to which he alludes." The passage is quite unintelligible even to one who knows the locality.

¹ On the O.M. it is marked as almost square, and seen from a little distance it has a decidedly square appearance.

the ground level. The western gap is less deep.¹ At the southern angle, which lies a little east of the true mid-point of the whole work, is another but much slighter cleft in the vallum. The arena, now overgrown with turf, but seeming to be very slightly convex, measures only about 28 by 20 paces, and the whole periphery, measured along the crest of the vallum, is 160 paces. The sides of the vallum slope regularly down to the arena, without trace of any terrace or steps. There are old lead-workings within 200 yards or so to the south. From the arena there is no view, but from the vallum one commands the site of the Roman station and a wide extent of country to the east. On the north and west the gradual rise of the hillside shuts out any view. The elevation is about 1000 feet.

The term amphitheatre is too dignified for a work so small as this: it raises false ideas of space and grandeur. Both *cavea* and *arena* are here too straitened to suggest Roman work, nor is it clear why the Roman, departing from his customary methods, should have preferred to construct it of earth when there was stone and to spare close at hand. It may be doubted whether a poor and small mining community such as this of Charterhouse would have indulged themselves with a permanent amphitheatre, let alone two, as Scarth asserts; and if they built even one only, why should they put it so far from their gates? When all allowance is made for the difference of size, the work presents certain interesting analogies with Maumbury: both are elliptical within, and of somewhat similar design without, and both are formed without fosses by excavating the area only. The orientation, however, is radically different.²

¹ It is deep enough to be evidently an entrance, albeit Prof. Haverfield roundly says "the O.M. marks two entrances, which do not exist" (*Vict. Co. Hist. Somerset.*).

² Phelps (who mentions the three gaps in the enceinte) called it "a perfect gymnasium." Prof. Haverfield says it "can hardly have been a pond and may have been a tiny amphitheatre" (*Vict. Co. Hist. Somerset.*, vol. i.; article on *Romano-British Somersetshire*). Phelps adds: "There are two

Perhaps the nearest parallel to the work at Charterhouse is to be found in the Romano-British village of Woodcuts in Cranborne Chase, where Pitt-Rivers opened up a curious work locally known as Church Barrow. Here there remained half of a circular vallum of earth which may have measured 110 yards in periphery when complete, the arena perhaps 60 feet across, and the bank at its highest 18 feet above the floor, which was sunk below the general ground level. Excavation showed that this vallum, embedded within which were found Roman remains, was raised upon an ancient roadway of pre-Roman character, and showed also that the roadway had at this point made a curious bend, only to be explained by supposing that there had at a still earlier date been some obstacle on the spot. The work was at any rate not earlier than the Roman period, and it is conceivable that the site was once occupied by a tumulus, which the British road would naturally avoid. The Romans, or Romanized British, less reverential, perhaps availed themselves of the tumulus to construct the work which Pitt-Rivers explored, removing part of its soil and throwing it up in a vallum over the roadway to the north. It is to be observed that this work is not elliptical, like Maumbury and Charterhouse, but circular. Sir. R. Colt Hoare long ago remarked on the frequent presence of similar circular works on the sites of the British villages of Wiltshire and Dorsetshire.¹ What was their purpose he does not

circles in the vicinity, which are supposed to be of a date anterior to the Romans having possession of this district, and intended for the celebration of the religious rites of the ancient Britons. The largest measures about 50 yards across; the smaller is about half the size. The name of the former is Gorse-Bigbury." These circles are not mentioned by Collinson, nor does there seem to be any trace or tradition of them to-day; but Phelps' account is too circumstantial to be altogether baseless. Rutter (*North-west Somerset*, 1829) wrote that the vicinity was "covered with squares, circles and irregular earthworks."

¹ They are found on similar sites in other parts of the country, *e.g.* at Grassington in Wharfedale, a British settlement of the first century A.D. and onwards, where "on the north side is a large, depressed, circular, or rather

venture to decide. Warne imagined them to be "religious or juridical." Nothing was found by Pitt-Rivers to show for what purpose the work at Woodcuts may have been used. He found no trace of any masonry.¹

In Anglesey, in the parish of Llanidan, was an analogous but larger work (Fig. 204), of which the purpose is perhaps less questionable. Known as Castell, it was an exact circle enclosed within an earthen vallum 30 feet thick and 12 feet high at its greatest elevation. An entrance (on the west), 15 feet wide, opened upon a level arena measuring 165 feet across.² That this was

oval enclosure, formed by a bank of earth and stones, upon which there is a double row of raised stones—I have counted nearly sixty in all—not a little suggestive of the so-called Druids' Circles. The enclosure is 54 feet in diameter, and has been destroyed on the west side" (H. Speight, in *Upper Wharfedale*, p. 430). In Warne's plan of Buzbury, near Blandford (Fig. 74), is shown a small earthwork to the north-east which, he says, "strongly resembles a ransacked tumulus, and its concave sides . . . give it the semblance of a miniature amphitheatre" (*Ancient Dorset*, p. 43). It was about one-half the size of that at Woodcuts. It is now quite vanished. He cites as analogous another work, now destroyed, on Came Down, with the remark that such things "suggest mediæval bull-baiting, badger-baiting, and cock-fighting rings."

¹ The name of Church Barrow is interesting. It has been suggested that the enclosure was perhaps used as a place of Christian worship before any church was built. Many ancient crosses are believed to mark similar spots, and of course the preacher came before the church. Similar names attach to other earthworks in various parts of the country, e.g. "The Kirk" (p. 139, n.), "Sunken Kirks," and "Old Kirk," in Cumberland, and "Sunken Church" near Ickleton, Cambs., where a Roman "basilica" is known to have stood. Colt Hoare mentions (*Anc. Wilts*, p. 175) "a little square entrenchment, vulgarly called Church Ditches, with a regular entrance to the east," near Ell Barrow, Wilts. In Scotland the term *clachan* is said to be equally applicable to stone circles and to churches. The presence of churches within ancient earthworks points the same way; sometimes the church was built on another site, and sometimes upon the spot where the people had first assembled for worship; and the advantages of assembling in any ancient earthwork which at all resembled an open-air theatre are obvious enough. See on this matter articles in *Trans. Cumb. and West. Antiq. Soc.*, vol. i., and Gomme's *Primitive Folkmoths*, p. 234; and cp. p. 318, note.

² Rowlands (*Mona Antiqua*, 1766) gives what he modestly calls "a reasonable account of things as they were at Llanidan," accompanied by the marvellous illustrations (?) characteristic of his age. He says that in his day the work was known as Bryn Gwyn or Brein Gwyn, which he renders

intended for the assemblage of an audience was proved by the finding of the remains of three or four rows of stone seats upon the vallum at the south side.¹ But for what purpose the audience were assembled is quite another

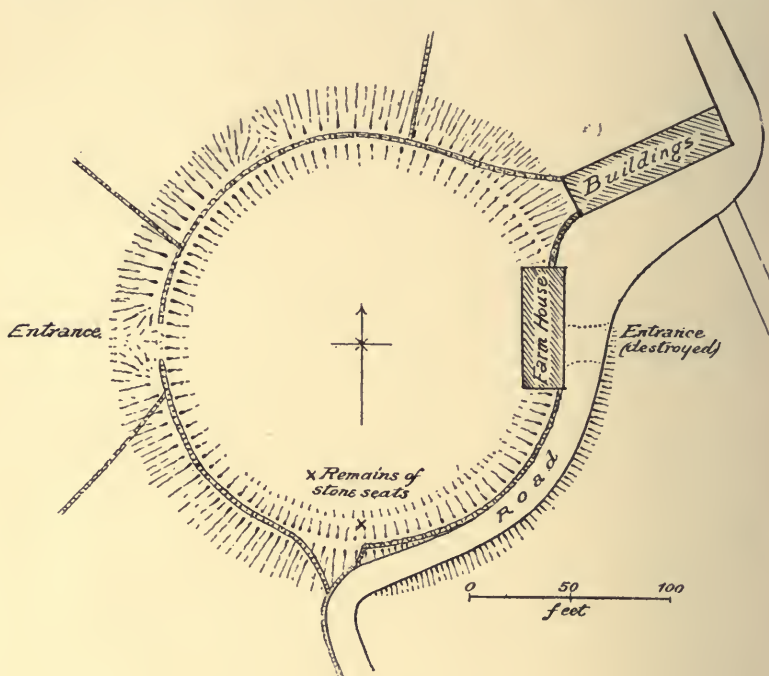


FIG. 204.—CASTELL, LLANIDAN.

question. The Celtic habit of meeting from time to time in tribal assemblies was noticed by Cæsar: it

“royal tribunal or court,” remarking that a Welsh poet had applied the same name to the Westminster House of Parliament. The walls, now sadly mutilated, stood in his day 15 feet in perpendicular height, and he expressly notes that there was no trace of any ditch either without or within, and that the floor of the arena was the natural level of the soil. It was close to Llanidan that Suetonius Paullinus is believed to have forced the passage of the Straits when he broke down the last stand of Druidism in Mona; and the whole neighbourhood once abounded in pre-historic remains, circles, cairns, and earthworks.

¹ See *Archæol. Journal*, vol. xxxi. (1874). In the same article are collected other instances of so-called amphitheatres in England and Wales.

survives to-day in the national *Eisteddfodau*. The most important external symbol of these meetings is the *gorsedd* or "throne" of the Bards, and the traditional *gorsedd* is a circular area marked out either by a bank of earth or by a ring of stones. The Castell of Llanidan may quite conceivably be such a *gorsedd*, and there is not the slightest reason to think it an *amphitheatrum castrense* of some supposed Roman garrison of Mona. It is even possible that the "amphitheatre" at Woodcuts, and similar ring-works in other Romano-British villages, were also *gorseddau*.¹ The Castell of Llanidan stands, it should be added, close to a megalithic circle called Tre'r Dryw Bach, "Little Druids' Town." If this suggestion—and it is nothing more—were acceptable, it might apply also to such circles as that at Swinside, Cumberland ("Sunken Kirk"), which has been proved by excavation not to have been sepulchral,² just as seemingly Arbor Low was not originally sepulchral.

In the Middle Ages the half-Celtic population of Cornwall built and used ring-works of a plan similar to those at Woodcuts and Llanidan for the performance of miracle-plays, for wrestling matches, and other such

¹ It is not more unreasonable to suppose that each important British community had its recognized place of assembly for purposes religious or administrative, than to believe that every Saxon community had its special moot. Writing in *Nature* (vol. lxxvi., p. 9, May 2, 1907; vol. lxxvii., p. 128, Dec. 12, 1907), the Rev. John Griffith describes the *gorsedd* ancient and modern, and gives reason for believing that it was always carefully oriented; but whereas "the present arrangement is exclusively solstitial," the older plan was equinoctial. He gives drawings from various old MSS. to establish his case, pointing out that in some of such drawings "the circle consists of nineteen stones, leaving open a splayed avenue to the east, the breadth of which corresponds to the sun's course from August to November, and from February to May." This seems to have been precisely the arrangement of many megalithic circles, as also of the oaken circle at Bleasdale, p. 526, n. If not intended as meeting-places, these circular enclosures must be supposed to have been intended either for some kind of sports or for use as cattle-pounds. Their relatively small area and the disproportionate size of the banks of many of them appear to be against the latter alternative.

² *Proc. Soc. Antiq.*, II., xix., 98.

meetings. Of these "Rounds," or "Roundagos," the best remaining is that at Perran—a ring-work of a diameter of 130 feet, surrounded by an earthen bank, 10 feet high and 6 feet or 7 feet wide at the top, the whole surrounded by a ditch from 5 feet to 6 feet deep. There are still to be seen the traces of tiers of stone seats—six or seven in number—on the inner slope of the bank, and the Round is calculated to have accommodated upwards of 2000 spectators. That at St. Just in Penwith, in shape an exact circle 126 feet in diameter, with a bank rising 7 feet above the arena and 10 feet above the bottom of the exterior ditch, had six tiers of seats. There are the remains of others at Trewern Road, near Madron, and at Castellack. There is no reason to think these works earlier than mediæval times: the Cornish built Rounds or Roundagos—*plane an guariau*, "play-places"—just as the people of other countries build bull-rings. They revived the practice as late as the last century: the amphitheatre at Gwennap was made about 1803, and there are others of even later date, built only some sixty years ago, to accommodate a preacher's audience at Newlyn and at Indian Queen, an inn midway between Bodmin and Truro. In one or two cases, however, an older work has been utilized or adapted, as at Kea, where the playing-ground "appears to have been originally a British ring-work," and at Kerris, near Paul. When Borlase wrote his *Antiquities of Cornwall* the latter was an oval enclosure measuring about 52 paces from north to south, and 34 paces from east to west, having an entrance at the southern end flanked by four rude monoliths some 8 feet in height.

Notwithstanding that the English will exert themselves more for amusement than for most other purposes, no other county can show earthworks constructed for purposes of sport on the scale of the Cornish Rounds. Here and there may be found something which, if not originally constructed for this end, was certainly once so

used, as, for example, the British work called King Arthur's Round Table at Penrith.¹ In the Middle Ages the only important national games were either military exercises, expressly intended "to prevent an Englishman from ever being worsted by a Frenchman"—the joust, the tournament, and the tilt—or the less edifying sports of bull-baiting, bear-baiting, and cock-fighting.² But for none of all these was there essential any earthwork. The barriers of the lists at joust or tournament were almost invariably made of timber, which could be easily decorated on occasion with paint and gilding, hangings, and heraldic scutcheons. In their earliest form the lists are said to have been oval or circular, like the earlier amphitheatres, but subsequently a square plan was preferred, and finally an oblong enclosure was the rule. There was no occasion for any spade work; ³ and if this was true of the greater

¹ The Bull Ring is the local name for an earthwork of the type of Arbor Low, near Chapel-en-le-Frith, Derbyshire. It may conceivably have been used for bull-baiting in later days.

² The military exercise of the lesser folk was shooting with the long-bow, for which were built butts—heaps of turves, or of stones overlaid with turves. Some of these butts, their origin forgotten, perhaps pass nowadays for tumuli. In other cases the name of butts—*e.g.* Robin Hood's Butts on Blackdown Hills—has been given to mounds of other origin, some of them unquestionably tumuli.

³ Richard I. enacted (1194) that there should annually be held five public tournaments in England, at or near as many stated spots. One of these was on the northern border of Oxfordshire, between Mixbury and Brackley, on a convenient stretch of turf adjoining the Oxford road, near the Bicester-Banbury cross-ways. The spot still has the name of Bears' (*i.g.* Bayards') Green, from *bayard*, "a horse." Another of the five grounds was on the Devizes road about 2 miles outside Salisbury, where a long-drawn fold of the chalk down provides a natural *cursus*, still known as the Tournament Stead, or the Field of Tournament. Yet a third is that in the parish of Smisby on the extreme edge of Derbyshire, 1 mile from Ashby-de-la-Zouche, immortalized by Scott's description in *Ivanhoe*, and still known as Tournament Field. Here there are considerable remains of earthworks—banks, which thirty years ago or so still stood 4 feet high, surrounding the "stead," which is an oblong with rounded corners. These can only have been intended to keep the spectators out of harm's way. The normal tourney-ground, like the normal tilt-yard, was simply a level open space and nothing more. London had several tilting-yards, one near the Church of St. James, Smithfield, and another on what is now the Horse Guards' Parade.

tournaments, it was still more true of the tilting-grounds frequented by the lesser folk. It was true also of the other sports, although exceptions occur. On Chislehurst Common, 100 yards west of the old parish church, survives a cockpit which, if not unique, is certainly one of the best preserved of its kind.¹ It is merely a shallow pond-like depression (Fig. 205), sunk $4\frac{1}{2}$ feet in the gravel soil. Roughly oval in shape, it measures 125 feet from north to south, and 105 feet from east to west. Its floor has been levelled in the centre only, where is a correctly circular space, 34 feet across, marked off by a very shallow dip from a slight ring of soil rising only 9 inches or so above the general level. This ring, which has a small gap at the south side, must originally have carried some kind of fence. The whole work is extremely slight, and looks less like a wholly intentional work than as if some convenient gravel-pit had been adapted.² Were it not for the inner circle and its ring, the depression is very like that left by an abandoned maze.

¹ Warne mentions it (in his account of Buzbury, *Anc. Dorset*, p. 43) as a "bull-ring," but it is too small to have served for the sport of bull-baiting. Old natives, who always speak of it as the Cockpit, recollect its being used for bouts of "scudgelling," *i.e.* singlestick, at the annual pleasure-fair, when cock-fighting was no longer legal (after 1835). The association of cockpits with churches, and with Shrove Tuesday, appears to have been quite matter of course. There was one adjoining Brantfield Church, Cumberland. But Cumberland long enjoyed an unenviable pre-eminence in all that appertained to this particularly degraded and particularly persistent Celtic sport. Near Whitbeck in that county, at Monk Foss, is a considerable excavation, a shallow square pit with rounded corners, measuring about 100 feet by 90 feet, with a dry "island" in the centre. This is known locally as the Cockpit, probably from its shape, but it is much too large for the purpose and much too wet. Probably it was a fish-pond.

² The material dug from the depression was at any rate carted away, there being no sign of any bank about the pit: At the west side is a sort of entrance-way which more resembles the cart-way from a gravel-pit than anything else; and the depression is not of a depth to have called for the provision of any special entrance-way. The same explanation would account for the irregularities of the floor outside the ring. In any case the work is quite exceptional. The customary "pit" for a cock-fight was not a pit at all, but a raised platform of sods fenced about with barriers of planks.

A somewhat similar depression at Hinton Charterhouse, near Bath, is known locally as the Bull-pit.

As a general rule the only visible apparatus required for bull-baiting was the massive iron ring to which the bull was chained. This was made fast to a stout log, or to a large piece of stone, which was in turn buried in the ground, only the ring showing. There are several still surviving *in situ*, *e.g.* at Hedon, Yorks, and at Brading,

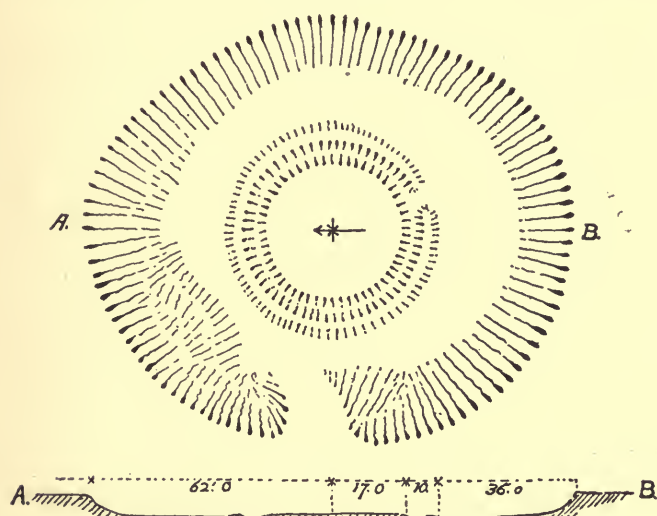


FIG. 205.—THE COCKPIT, CHISLEHURST.

Isle of Wight; and names reminiscent of the sport still attach to open spaces in many old towns: Birmingham has its Bull Ring, and Dorchester its Bull-Stake Street.¹ It was usual, however, to conduct such sports outside the town's boundaries, and occasionally there was constructed, it would seem, a bull-pit to harbour the animal in readiness

¹ Wells, Somerset, and Wokingham, Berks, were amongst the towns famous for bull-baiting. At the latter place there was a bequest for the provision of two bulls annually, the flesh being subsequently given to the poor. Bull-running was a different sport, peculiar apparently to Stamford, Lincs, and Tutbury, Staffs, and required not even so much as a ring.

for the baiting, in lieu of the customary pound. There is such a pit $\frac{1}{2}$ mile west of Buckland Dinham, in Somerset—an oblong excavation 132 feet long and 48 feet wide. The floor is quite level, but as the ground has a slight natural slope towards the east, the containing sides of the pit gradually rise from nothing to a height of perhaps 10 feet. There is no trace of any bank or other barrier at the entrance. The adjacent field is still known as the Bull-pit Ground. In the sixteenth century Bankside, Southwark, possessed both a “bolle-pit” and a “bere-pit”—permanent circular arenas surrounded by high walls, to prevent the non-paying crowd from sharing the entertainment; but these, like the “play-house” adjoining, were presumably exceptional examples of the luxurious demands of London pleasure-seekers. A cock-fight required no such apparatus: it could be fought equally well in a drawing-room, as old prints of the last century declare, or in an empty room in a modern warehouse, as the county police can testify. An upper room in the Old Rectory at Burford appears to have been regularly used for the purpose, and in the wainscot are still to be seen the small sliding hatches through which the birds were admitted to the floor. But, as a rule, an empty barn served the purpose. There were special buildings in some localities set aside, if not actually erected, for the sport, *e.g.* at Leicester, where a hexagonal building is marked “Cockpit” in Speed’s map (*circa* 1610), and at Carlisle, where an octagonal building some 40 feet across the floor was similarly known. London had at least three cockpits of greater vogue than others, *viz.* in Whitehall (said to have been built by Henry VIII.), in Drury Lane, and in Jewin Street. The name of Cockspur Street, adjoining Whitehall, tells its own tale of the particular trade there centred, as does also that of Cockpit Stairs in Old Queen Street, Westminster.

Certain feeble rectangular enclosures in the Eastern Counties are said to have been constructed for the game

of camp,¹ a kind of undeveloped football, now obsolete, which seems to have been peculiarly popular in East Anglia. Such names as "Upper" and "Lower Camp-fields," attaching to what the lawyers call "parcels" of land at Norton Woodseats (Essex), and "Le Camping Close" at Fornham St. Genevieve (Suffolk), probably refer to the fact that the game was once played there. Tusser, himself an Essex man, is authority for the statement that the game was excellent for the grass-lands.² It is, however, by no means clear that any enclosure was deemed needful. Seemingly two pairs of goal-posts were as much as was necessary. The terms *campus* and *camp* were used before Tusser's time for any level enclosure, so that not every local name containing the syllable need refer to the game in question.³

Within the north-eastern angle of the Norman enceinte of Wareham, Dorset, is "a rectangular enclosure about 60 yards by 30 yards, within a bank of about 4 feet high with a base of 12 feet, and an exterior ditch about 6 feet broad. There is an entrance at one end, and the angles are slightly rounded off, and, as the north-east angle rises somewhat with the tail of the adjacent bank (*i.e.* the

¹ Is this derived from the Welsh *camp*, or *vice versâ*? *Camp* in the dictionary is said to mean both a "game" and a "circle"; and Pennant says that a menhir behind Penmaenmawr, near the circle of Meini Hirion ("Longstones") was called *maen y campiau*, "stone of games." Something analogous to the mediæval game of camping long survived in Wales, and it is said that "the common belief of the peasantry" is that the stone circles were erected by the early Britons as places for games.

² "In meadow or pasture (to grow the more fine)
Let campers be camping in any of thine :
Which if ye do suffer, when low is the spring,
You gaine to yourself a commodious thing."

Five Hundred Points of Good Husbandry (1557).

Other campers may be glad of this quotation. For other details about the game, see *Dictionary of British Folklore* (A. B. Gomme).

³ At Eye (Suffolk) a field known as the Camp, or the Camping Field, was found in 1857 to cover the remains of Roman buildings; but there seem to have been no visible earthworks on the surface, and the name of the field was probably derived from its having long been used for playing camp.

Norman enceinte), it is clear that it is a later work." So G. T. Clark,¹ who remarks that it is "exactly like a small Roman camp," and that "it is called the bowling-green." Perhaps it was made for the purpose, albeit seemingly needlessly elaborate; but in a place like Wareham time and trouble would be less accounted of than elsewhere. Certainly bowling-greens were often laid out within old castle-grounds, as now are croquet-lawns and tennis-courts, and allowance has to be made for such modern spade-work.

In the later Middle Ages were made also many mazes, complicated pathways cut in the turf, usually of circular plan, and but slightly sunk below the natural level of the ground. These are rapidly overgrown and effaced when no longer trodden by the feet of the village children; in a very few years their sites become no more than saucer-like hollows or diminutive amphitheatres without visible token of their true origin, and, like most things of the kind, put on a seeming older than the reality. There is one at Asenby, in the North Riding, sunk in a hollow at the top of an oval hillock, which to-day looks very like a damaged replica of the "amphitheatre" at Charterhouse-on-Mendip. Only a very few remain intact, as at Alkborough, in Lincolnshire. It is marvellous that the memory of such things, once prominent features of rural life, can die out so rapidly as it does. The Asenby maze is quite unknown to most of the villagers to-day, yet there are persons still alive who will tell one that they have trodden it on many a summer's evening, and, kneeling down at the centre, have listened "to hear the fairies singing." They still call the site the "Fairies' Hill."²

¹ *Medieval Military Architecture*, vol. ii., p. 515.

² For the origin and purpose of English mazes, see an article in the *Archæol. Journal*, vol. xiii. They were probably penitential in origin, but from reminiscences of the Game of Troy described in Vergil, when young Iulus led the sport, they acquired the name of "Julian's Bowers," or in northern dialect "Jullinbores." Similarly, in Welsh a maze was called

Such fighting as vexed England from the days of the Angevin kings to those of the Stuarts has left few marks upon the map. On some of the known scenes of ancient battles there remains no visible trace at all, and in most other cases the remains are merely the vague and formless fragments of what may have been entrenchments. To the times of the battles of Lewes (1264), and of Stoke near Newark (1487), are attributed some feeble vestiges in those localities, but only conjecturally, and to the days of the Spanish Armada have been doubtfully supposed to belong certain other *vestigia*, e.g. the old fort at Tilbury. But such attributions are almost without exception suspicious. The operations of the Civil War made a greater mark, not only because the fighting was so general and the struggle so prolonged, but also because the advent of cannon¹ revived the almost forgotten use of entrenchments. Artillery was a prominent feature in the wars of King and Parliament, but it was still of the feeblest kind, much more terrifying than dangerous: the guns were very small with a range of no more than a few hundred yards, the shot mostly went anywhere rather than where it was aimed, and the shells or "bursting shot" commonly failed to burst at all.² Therefore the earthworks required,

Caerdroia, "Troy Town." Instances are known of the occurrence of the traditional maze-patterns in *Roman* mosaics: e.g. at Harpham, Yorks, at Caerlleon, and a third in Northamptonshire (see *Proc. Soc. Antiq.*, xx., 1904-5).

¹ Edward III. is said to have employed cannon at Crécy. Edward VI. commanded the coast-towns to make and mount guns for defence against invasion. Henry VIII.'s cannon were larger and heavier than any before, and he used them at the sieges of Calais and Boulogne. Elizabeth still further improved the country's artillery. But the point is that, until the Civil Wars, cannon played no important part in any fighting upon English soil. The martello-towers of our coasts are mostly works of the end of the eighteenth century, constructed to meet the menace of invasion from France. They take their name from a similar tower on Martella Point, Corsica, upon which they were modelled.

² The quality of the guns and gunnery is illustrated by the case of Lichfield, besieged by the Parliamentarians in 1643. Their "granadoes" did

whether to shelter the guns or the enemy, were of the slightest kind, and as the scene of the fighting was mostly in or near the more densely peopled centres, the sites of batteries and trenches were mostly given back at once to the plough. Colchester stood a bitter siege of seventy-six days, yet there remains scarcely anything of Fairfax's spadework; and the same is true of most places. The course of the struggle is marked rather by what the combatants destroyed than by what they constructed, and Cromwell's Ironsides battered down, burnt, or blew up more castles, forts, and mansions than they built or rebuilt. Their field-works were seldom on a great scale. The most striking example with which the writer is acquainted is in a grass field at Quarrendon, on the site of the so-called Battle of Aylesbury (1642). Here, besides other mounds and trenches of less obvious purpose, is a line of entrenchments running chevron-wise along the crest of the high ground—a considerable vallum rising 4–5 feet, with gaps at intervals of 20 yards or so, marking the embrasures of a full dozen of guns. A peculiar feature of these field-works is that the soil for the vallum was obtained from both sides, the trenches in front and in rear being equally deep.

At Newark-on-Trent is a typical specimen of the fortification of the period, known as the Queen's Sconce (Fig. 206). It formed the north-western angle of the defences constructed to cover the town which was thrice besieged between the years 1642 and 1646. It is a simple adaptation of the bastion system, lately introduced from

not always carry even across "the small fish-pond" outside the precincts of the Cathedral-close, which was almost the sole defence of the town on that side. Fired from "a terrifying gunn called a mortar-piece," many of them dropped unexploded into the water, and have been from time to time fished up intact. See *Archæol. Journal*, vol. xxxi. (1874). Something is said of the guns of the period in C. H. Frith's *Cromwell's Army*. Bad as they were, they determined the issue of the Civil War.

Italy¹—a rectangular fort standing within a wide and deep moat, its corners furnished with bastions, and a high and massive rampart running round the whole. The ground outside falls away to the Devon river, the slope heightened in places by scarping. There used to be a second work of the same plan—the King's Sconce—at the opposite end of the town, but it has long since been built over. This and the Queen's Sconce guarded either end

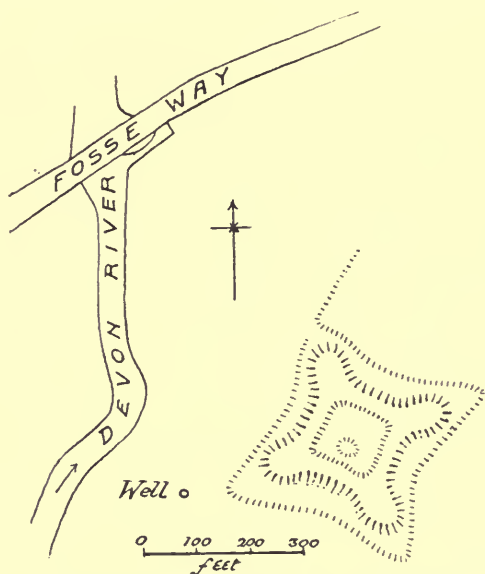


FIG. 206.—QUEEN'S SCONCE, NEWARK.

of the Fosse Way, which traverses the town. About a mile north, at Winthorpe, are the remains of a third work of the kind, erected by the besieging force to prevent the bringing of supplies up the River Trent. At Earith, on the Cambridgeshire border, 10 miles east of Huntingdon, is a perfectly preserved fort of similar type (Fig. 207), styled The Bulwark, but nothing is at present known

¹ The bastion was an Italian invention belonging to the first quarter of the sixteenth century. It was perfected by Vauban during the latter half of the seventeenth century, in the wars of Louis XIV. of France.

as to its date.¹ It is a formidable work, its area measuring 250 feet across, the bastions projecting nearly 100 feet. The rampart surrounding the area has in places a width of more than 20 feet, the moat is from 30 to 40 feet wide, and round its outer edge runs a low breast-work, which loops outwards on the northern side to enclose a sort of platform.

Speaking of the Royalist defences of Newark a contemporary wrote that "the whole seemed invincible," as

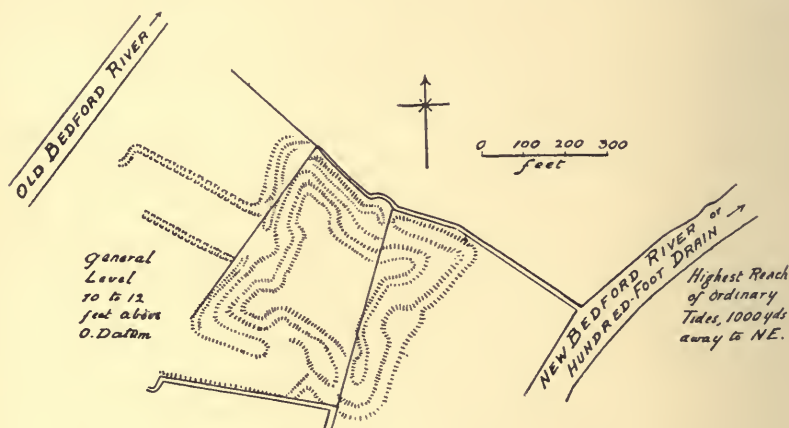


FIG. 207.—THE BULWARK, EARITH.

indeed they proved to be, so elaborately was the place defended by "strong bastions, earthworks, half-moons, counterscarps, redoubts, pitfalls, and an impregnable line

¹ Some small excavations made here in 1907 produced only negative results. They showed that the work had suffered but little from weathering, and lend support therefore to the view that it is of late date. Nevertheless, the opinion has been put forward that The Bulwark was possibly a Roman work of late date; and it is asserted that Roman forts of a similar plan are known in countries as wide apart as Egypt and Gaul, though none have thus far been identified in this country. As matters now stand, any evidence for the Roman origin of The Bulwark is still to be found; and though it may be difficult to understand why so important a work was erected in so seemingly unimportant a place, it is safer to suppose that it is probably Cromwellian, perhaps constructed at the time when Cambridge Castle was remodelled by the Parliamentarians, 1643.

of earth and turf palisaded and stockaded.”¹ The works of the attacking Scots and Parliamentarians were quite as complex and vastly more extensive ; indeed so great is the variety of design displayed in their fortifications that a civilian is tempted to think that the engineers of the time had as yet scarcely learnt the proper use of the bastion, and were simply experimenting with its capabilities.

One of the besieging party prepared a careful map of the whole, from which are taken the specimens illustrated in Fig. 208.² The siege-lines surrounded the entire town, embracing an area some 5 miles over, while within and

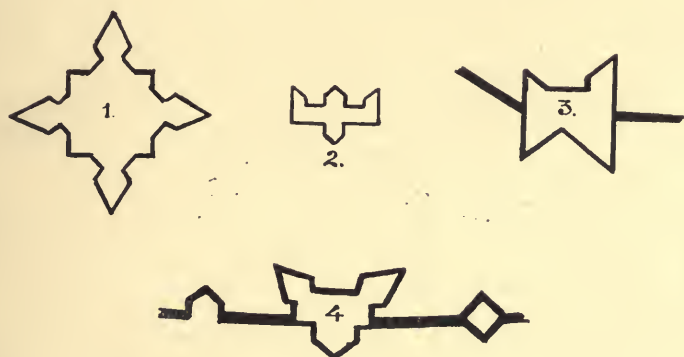


FIG. 208.—SIEGE-WORKS BEFORE NEWARK.³

- 1.—Headquarters of Scots Army in the Field. 2.—Redoubt at Crankley Point. 3.—Moll's Hornwork at Winthorpe. 4.—Crawford's Sence and Redoubts on the siege-line towards Balderton.

without were scattered numbers of separate works of varying sizes and designs ; and the adjoining villages—Winthorpe, Coddington, Balderton, Farndon, &c.—were similarly entrenched as field-quarters of the various commanders. Of all these many works there remain, however, few determinate vestiges besides the Queen's Sence and that at Winthorpe (p. 605). The curious little fort at

¹ MS. letter quoted by Cornelius Brown, *Hist. of Newark*, vol. ii., p. 95.

² Two reproductions of this map are given by Cornelius Brown, *op. cit.*

³ These figures are not to scale.

Crankley Point (Fig. 208, 2) is now quite vanished, but a few yards in its rear is to be seen another, a simple square of 24 yards, with a slight vallum and broad fosse, the vallum rising only 2 feet above the area and 3 feet above the floor of the fosse, which is 15 feet in width. It is precisely like a host of simple rectangular works, Roman and British and mediæval. Close by the road to Kelham is discernible another (Fig. 209) of less regular plan and of

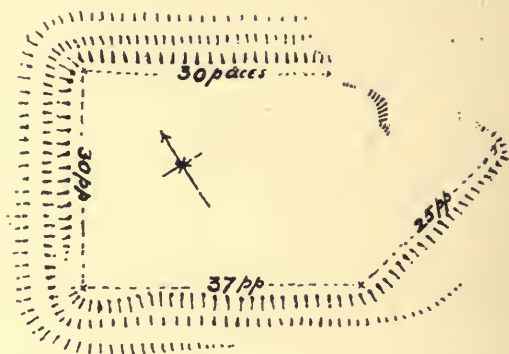


FIG. 209.—SIEGE-WORK OF THE SCOTS, NEWARK.

very slight relief. Both these would seem to have been constructed by the Scots.

A good deal of work was done at this period in remodelling older fortresses. A plan is given (Fig. 210) of the old Castle of Cambridge as it was reconstructed by Cromwellian engineers in 1643. Originally part of the area of a Roman station of unknown name, upwards of 28 acres in extent, it had been selected as the site of a mount-and-bailey fortress of normal Norman type, and this again had given way to a stone-built fortress. In the Civil Wars the walls and towers of the bailey—nearly 4 acres in extent—were cleared away and the angles were thrown out in bastions, the great fosse of the mount being partially filled up and the line of the bailey's rampart carried over it to abut upon the mount. The

great moat which once surrounded the whole has been entirely effaced by later alterations.

The chief concern of the military engineers of the time being to secure gun-platforms of some elevation, they availed themselves of any convenient mound, adapting indifferently natural hills, Norman mounts, and tumuli of

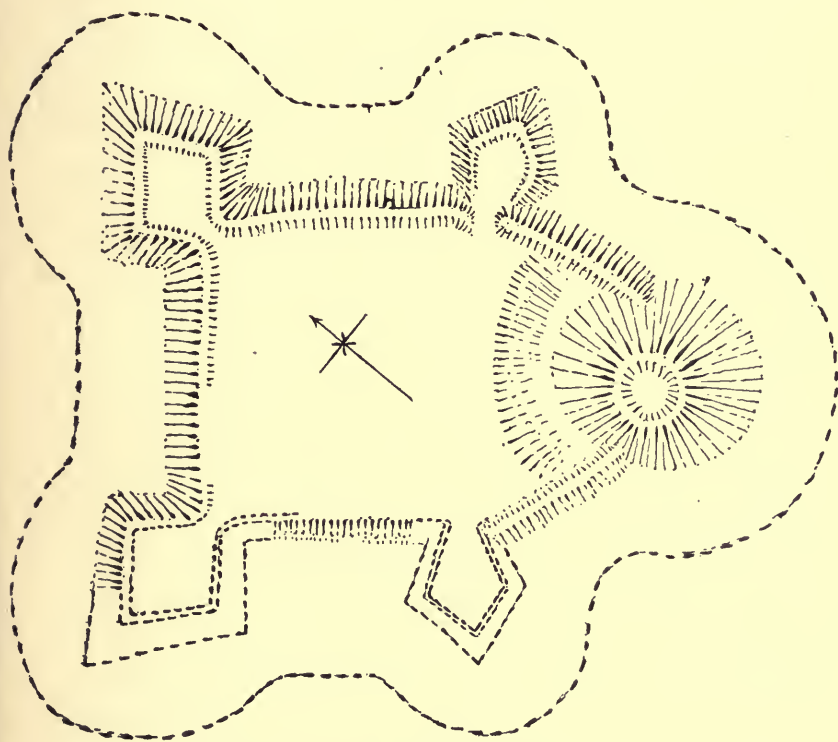


FIG. 210.—CAMBRIDGE CASTLE IN 1643.

yet older date. The Derry Mount at Nottingham Castle was originally a tumulus: Colonel Hutchinson mounted guns upon it. At York a tumulus (Saxon) on Lamel Hill, some 620 yards south-east of Walmgate Bar, was heightened for the same purpose in 1644; and The Bail, originally a Norman motte, was similarly utilized. Ailey

Hill, at Ripon, seems to have been tampered with in the same fashion (Fig. 136).

About many of the country mansions which stood sieges at this time may be traced works which unquestionably belong to this period, *e.g.* Basing House; but in the vast majority of cases the works found upon such sites owe nothing whatever to the military engineers of King or of Parliament; they are the remains of the normal fortifications of castle-palaces and palace-castles, and of considerably earlier date.¹ The same is true of many of the so-called Cromwellian earthworks often found in the vicinity of churches. In most cases they are indisputably older.

It is on record that at the time of the Napoleonic scare the good people of Surrey talked seriously of refortifying and re-occupying the prehistoric fort of Anstiebury, near Leith Hill. The tough tradition which alone could have prompted such a proposal was more active still in Cromwell's time, and many old camps were reoccupied by one or other party during the course of the war, *e.g.* the Cornish fortress of Castell an Dinas, those of Castle Dour (Dor) near Fowey and Stratton near Bude, and the Dorsetshire works of Maumbury Rings, Badbury Rings, and Hambledon Hill. Two thousand "clubmen" attempted in 1645 to hold the latter position against Colonel Desborough, who was compelled to storm it.

¹ There is a capital example at Wing, Bucks, where, in the large field still known as Wing Park, are the foundation-marks of a very large number of vanished buildings of smaller size, and also the defences of what was once the house of the Dormers. There are massive earthen ramparts, from 30 to 50 feet in thickness, enclosing three sides of a platform some 400 feet long by 130 feet wide, and rising above it from 10 to 15 feet or more. The fourth side is covered by a spacious garden-space sunk into the very gentle slope of the ground. With these ramparts should be compared those at Quarrendon (p. 553). In the latter case the needful soil was obtained from the moats; at Wing there was no moat, and the soil for the ramparts came from the sunken garden-space. Charles I slept at Dormers' August 27th, 1645. To-day there is not a stone or a brick visible on the site.

In Devonshire, near Dartmouth, is an odd and irregular earthwork, called "Gallants' Bower," which is known to have been occupied at this time, but is perhaps of much older date.

On the whole it is safe to assume that, obviously bastion-built works excepted, entrenchments of any size are probably not of Cromwellian time, and that no works whatever are of that age if found in places remote from towns and villages. The myth of Cromwell's omnipresence is far-reaching. Old women in Wales will assure you that the caers and cairns of their hill-tops are his *reliquiæ*, and that he fought battles on the crests of mountains like Tal-y-fan, just as old wives of England would have you believe that his poor sakers and falconets could be used with effect at ranges which would do credit to the big guns of to-day. Myth gathers about the men as the dust settles upon the things of the past, and the bigger the thing or the man, the more the room for dust and myth.

In many localities survive the traces of the old-time practice of run-rig¹ cultivation, under which each parcel or "dole" of land was separated from the rest not by hedges, but by narrow "balks" of unbroken ground. In Wharfedale,² where occur many examples, the "strips" of land, approximately a rood in extent, are known as "lands" when under plough, "dales" (*i.q.* doles) when in pasturage, while the dividing balks are often termed "reins." Yet another term for the latter is "selions" (*i.q.* French *sillons*, "furrows"). In the course of years these balks may come to appear like artificially raised banks dividing the field into plots of small size. There

¹ "Rig" is the same word as "ridge." In Yorkshire, and the north generally, it attaches to many old sites where the traces of earthworks are discernible (*e.g.* Black Rigs, Auld Rigs, &c.), and more particularly to the raised *aggeres* of Roman roads. The "Roman Rig," near Ripon, is a genuine Roman road; that near Sheffield is, perhaps, an ancient dyke.

² H. Speight, *Upper Wharfedale*, pp. 297, 301, 474.

is a good instance at Runton, Norfolk, where the balks are known as "mering-balks" or "mering-banks" (A.-S., *meare*, "boundary.") Along the banks run the paths by which the various plots are reached, and what was originally a boundary fence comes to be a right of way.¹ The natural process whereby the balk is gradually raised higher and higher above the cultivated ground on either side is analogous to that which gives the appearance of artificially raised causeways to the narrow "droves" which serve as accommodation roads in fenny soils: the constant ploughing of the fields on either hand causes a gradual settlement of their surface, whereas the "drove" is preserved at its original height by the turf which covers it.² Such raised roadways have, of course, nothing in common with those *paved* roads which have been purposely raised after the fashion of the Roman. There are miles of raised roadway in the country which never owed anything to Rome; in some parts of the country they are known as "rampers" (*i.q.* ramparts) by the peasantry, and elsewhere as "causeys" (*i.q.* *chaussées*,)³ and even as "dykes."

¹ The same thing has happened with many old dykes (*e.g.* the Buckinghamshire Grim's Dyke, near Lacey Green), with Roman roads (*e.g.* the Port Way, near Andover), and even with old town-walls. The line of one or all of these is often traceable by narrow and seemingly purposeless lanes or footways.

² A familiar phenomenon of the fens is the "lifting" of immense clouds of fine peaty dust whenever the fields are ploughed in dry but windy weather. It rises into the air like a thin rolling smoke, varying in density with the strength of the wind, so that the sky in some parts of East Anglia is frequently thus made hazy for days together in the spring and autumn. Such "lifting of the fen" cannot, of course, occur where the surface is left under grass. In the Somersetshire levels raised "droves" are produced by digging out the peat on either side, but so soft is the subsoil that a roadway, originally 10 or 15 feet above the turbaries beside it, will in two or three years sink to one and the same level with the surrounding ground. In higher localities the intervening banks remain, to bother the amateur with the suggestion of dykes, camps, and what not.

³ The provincial form is in this case more correct than the standard "causeway." These various terms are also applied to roads of genuinely Roman origin.

This chapter of miscellanies may conclude with one other case to exemplify the shortness of men's memories and the difficulties which an antiquary must be prepared to face. In a wood bearing the name of White-mere Dyke, a quarter of a mile from the works on Hutton Moor, Ripon, lie "the Ringlets" or "the Trenches." These are (Fig. 211) a series of eight concentric banks of

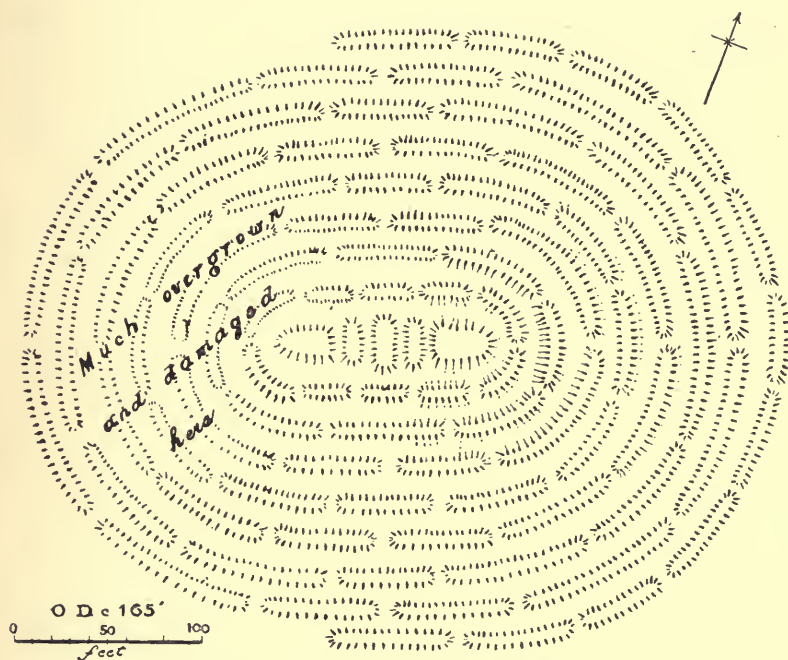


FIG. 211—DUCKPOND, HUTTON MOOR.

oval plan, about 3 feet high and 8 feet wide, divided by spaces of the same width, and ending about a central bank. Each ring is cut at regular distances by gaps which lead in zigzag fashion to the centre. The loose sandy soil shows no trace of water, and the whole work looks like nothing but a maze of unusual plan. As a matter of fact it was constructed about the year 1770 to provide a breeding-place for the wild-fowl which then frequented

the Moor, and when it was made the spot was a sodden bog, the ground full of springs. Only forty years ago the water stood deep enough in the fosses to debar even bird's-nesting boys from reaching to the central island. What has caused the failure of the springs is unknown,¹ but failed they have completely, and the spot now shows nothing more suggestive of a wet soil than the gorgeous carmine willow-weed. Still, one might have thought that the memory of the purpose of a thing so odd would have been yet green in the neighbourhood. It is all but wholly dead; and with difficulty after six weeks of inquiry could the writer at last find a person who really knew the Ringlets and their purpose.

¹ It was possibly due to the extensive quarrying of the vicinity. In the same way the opening of coal-mines constantly causes the disappearance of springs and surface water.

CHAPTER. XVIII

THE SOUTH DOWNS

*"No tender-hearted garden crowns,
No bosomed woods adorn
Our blunt, bow-headed, whale-backed Downs,
But gnarled and writhen thorn—
Bare slopes where chasing shadows skim,
And through the gaps revealed,
Belt upon belt, the wooded dim
Blue goodness of the Weald."*

SOUTH of the lower Thames, and parallel with its general course from west to east, lie three slender lines of hills, divided by two broader belts of valley-land. The middle chain, extending from Tunbridge Wells to Horsham, is less lofty than the others, and of gentler slope. Different in geological formation, it differs therefore in most other points, and although it rises at Wych Cross to the respectable height of 631 feet, and to 792 feet in Crowborough Beacon, so gradual is its general slope to north and south, so thickly is it clad for the most part in oak and beech, that it derives its name not from its elevation, but from its vegetation. The "Forest" of Ashdown, of Worth, of Tilgate or of St. Leonard, it is but a part, if the choicest part, of the Weald of Sussex, the still surviving remnant of the once vast and pathless Forest of Anderida—Andredeslea or Andredesweald, as the Saxons

rewrote the original Celtic name.¹ The other hill-chains rear themselves more loftily and more abruptly out of the levels to north and south, their steep sides mostly naked of wood—not “forests,” but “Downs”; and wherever a quarry has gored their flanks, the white chalk of their fabric gleams for miles across the intervening valleys, lends delicate and elusive shades of colour to the few plough-fields, and tints even the general greenness of their slopes with a greyer and more opaque tone than that which paints the richer soil of the water-meadows below. With vegetation, colour, even outline, quite unlike those of the Forest, the Downs are unlike in their archæology also; for while the Forest has scarcely a trace to show of the handiwork of prehistoric times, the Downs are seared and seamed therewith from end to end, the South Downs especially, which, drawn like a wall between the Weald and the sea, stretch east and west from Pevensey Level to Havant, a crow-flight distance of 60 miles. And so narrow withal is the range that at no point does it exceed 7 miles in breadth, falling as a rule far short of that figure. These two natural features—the wood below and the chalk above—have dominated men and things in Sussex from prehistoric times until to-day. The real heart of Sussex was forest, more desolate than ever was Sherwood or Arden, for no Robin Hood roved here, no poet has peopled it with Orlando and Rosalinds, here are no folk-tales of Oberons and Titanias. In its silences are lost both History and Romance. It has made no mark upon the centuries. Around it lay towns with ancient pedigrees and proud traditions: Guildford and Bramber and Lewes, Pevensey, Tonbridge, and Steyning—these have each their annals, but they lie on the edge of the Forest, not within it. It can boast not one important

¹ The original name is thought to have been *Coed an Tref*, “the wood without dwelling-place.”

mediæval town, not one religious house of rank, scarce an ancient castle. Domesday found hardly one settlement within its desolate pale. In the days of King Alfred it was merely "that boundless wood that men call Andred," through which only the wild Danes dared venture, and such few roads as the tireless Roman had driven across its swamps and jungles to link up with Londinium the south-coast fortresses of Portus Magnus, Regnum, Portus Adurni and Anderida, were already well-nigh impassable, as to-day they are scarce traceable. Of the days before the Roman the Weald can show no certain monument that may be called important save Lingfield Mark Camp. From days beyond all voice of history the Weald was what the Saxons found it still, dense and all but trackless jungle, a waste haunt of fur and feather and of little else; and when the Roman abandoned the land which he had reclaimed, the Forest "rushed in" as victoriously as in Kipling's India, to reign supreme despite the Saxon's stubborn antagonism until, more than a thousand years after, the needs of the Navy put a period to its mightiest oaks. In the eighteenth century¹ Sussex oak and Sussex iron built the ships and forged the guns of England, and although only the giants of the wood were felled for timber, the younger growth perished to provide fuel for the furnaces. The writer has talked with men who had travelled southward to Sussex to buy growing timber for the shipyards of the Clyde. The advent of the iron-built ship, the opening of iron mines elsewhere, came, not indeed in time to save the Forest, but in time to save those few patches of it which still crown the middle hills—the gigantic knotted remnant of Highbeach, and the "monumental oaks" which still draw their shade thick about King Alfred's Saxon church of Worth. There can

¹ The last forge to be worked is said to have been that at Ashburnham, which was blown out in 1809.

be no more eloquent proof of the ancient desolation of the great Forest than the simple fact that scarce an old road is to be found running east and west across it. One such there was indeed, the old Pilgrims' Way along the North Downs, by which the faithful travelled out of the west to St. Thomas' shrine at Canterbury.¹

That way was still *the* way in Chaucer's time, and it wound its grassy length along the hills, simply because even so late the lower ground of the Weald was impracticable. Nay, diaries and other records of the eighteenth century declare that it was still for the most part, during the winter months at least, impassable. Then came the "discovery" of Brighthelmston by Dr. Russell of Lewes and the Prince Regent, and the fashionable craze for sea-bathing and sea-air, which is still the excuse that brings most visitors to the Sussex coast; and the road followed where Fashion called. The modern railway map in another way illustrates the same facts: the trunk-lines radiate all from London to the sea, and conditioned always by topography, they follow perforce the courses dictated by the configuration of the hills. Through gaps at Lewes, at Pyecombe, at Bramber, at Arundel, at Lavant, and at Petersfield, they pass through the great southern wall to their termini at Eastbourne and Newhaven, Brighton, Shoreham, Worthing, Bognor, and Southampton—places one and all ancient in history, but in point of prosperity and importance modern of the modern.

Through three of these gaps flow seawards the three principal streams that drain the Weald: the Arun gives its name to Arundel; the Adur winds past Steyning to Shoreham; the main street of Lewes bridges the Ouse. These rivers, all bearing names of the old Celtic time, are

¹ Prof. Boyd Dawkins believes this to be an ancient British trackway, pointing out that it traverses the settlement at Harbledown, which belonged to the Late-Celtic time. *Archæological Journal*, vol. lix.

still considerable, but at an earlier date they were less rivers than arms of the sea ; and unharnessed by any such embankments as now control them they spread out in wide sheets of open water upon the northern side of the South Downs, and running far up into the Weald formed morasses and lagoons in the very heart of the Forest. At a date not at all remote as geologists count, the sea washed the foothills of the Downs on the south continuously. Then the coast was lifted, and for centuries the sea has been slowly reclaiming what it then gave up. In Roman times the coast-line lay further south than now, and the Roman town which once stood at the mouth of the Adur has long ago sunk into the sea ; and under the sea too at Saxon Selsey is the site of the parent cathedral later transferred to Chichester. The rivers have altered appreciably within far more recent years. The Adur of to-day is but a sorry stream at Steyning, and broad as is its channel between Bramber and Shoreham it carries now no commerce ; and whereas once it fell straight into the sea below the latter place, it must now find a devious outlet far to the east. Yet Steyning was once a port, and a busy one to boot, and by the western bank of the river, in the short six miles between Steyning and the sea, lay as late as the thirteenth century two other populous towns, of which there remain to-day in the level meadows between the river and the foot-hills no vestiges at all, save here and there the faint traces of old foundations and the two forlorn and solitary churches of Botolphs and Coombes. It is no mere idle tradition that Botolphs once possessed half-a-dozen churches, yet to-day the very sites of all but one have vanished utterly,¹ and that which remains

¹ One of the lost churches is said to have stood close to where now is Annington Farm. There is a curious walled enclosure by the roadside there, very like a deserted graveyard. It is known as Darkless Close, but no one can say why. Was it once perhaps *Le Clos d'Eglise* or *de Ecclesia*? That same impatience of speech which could turn Brighthelmston into Brighton, might deal as drastically with Norman-French, or Monkish Latin.

breathes no hint of its former dignity. It is not so with Steyning, whose splendid Norman church, a mere fragment of that which its builders intended, is a pathetic object-lesson in the vanity of human wishes and the flux of time. For Steyning was in those days a prosperous place, so prosperous that its burgesses conceived the ambition of building them a fane worthy of their importance. The work began, the choir was reared—a piece of elaborate carving and foliated architecture without its like, at least in this neighbourhood, save at New Shoreham. But ere the work could be completed it came to a standstill. The river which had brought wealth to the town suddenly failed. The “law of the eastward drift” blocked up its mouth; the gradual deforestation of the Weald to the northward diminished the volume of its waters, and left it unable to scour out its channel as before. But whatever the reasons there was the fact; the keels no longer made their haven here, the quays fell idle, the townsmen saw their fortune pass from them. The building of the church was stopped, and Steyning went numbly to sleep in the shadow of its grey-green hills, as it still sleeps after six centuries—a town of thwarted ambitions and pride rebuked, and withal of quaint old houses and flowery gardens and sweet silences, “a haunt of ancient peace.”

The Arun westward has to a great extent shared the Adur's fate, and like the Adur is now known to none but a few anglers and still fewer oarsmen; but the great camp at Burpham (Fig. 212) speaks clearly enough of a time when Arun's waters flowed far more widely than to-day. Eastward the Ouse was once a broad estuary, which with its tributary now called Glynde Reach, made an island of the great chalk mass of Mount Caburn overlooking Lewes; and further eastward still the Cuckmere River very definitely divided into two parts the tumbled high-grounds between the Ouse Valley and Pevensey Level.

If one should imagine the sea-level as having been

where now is the 50-foot contour line of the Ordnance Survey, one will perhaps have a fairly correct idea of the map of Southern Sussex as it was in the prehistoric time. Such a map will show a coast-line just as it is now from Beachy Head to Brighton, but running regularly westward thence along the foot-hills to Old Shoreham, and so by Lancing and under the slope of Highdown above Worthing, through Arundel direct to Chichester. Above this coast-line the great wall of chalk towered treeless, and the view northward from its crest ranged over nothing but impassable forest and estuaries as impassable. From Bignor to Pulborough the Arun made an inland lake, the arms of which extended west to Selham and north to Billingshurst; the Adur spread broader still as far as Coolham westward and Hickstead on the east; while Caburn was an island amidst a sea whose waters reached to Fletching and to Chalvington, all but uniting there with those of the Cuckmere, and these again with the sea which then covered Pevensey Level. Looking eastward from Ditchling Beacon on a winter's afternoon, when the mists lie heavy along the lower ground, one may see the ancient map restored, and realize that the South Downs are less one line of hills than a series of hill-masses lying island-wise along the marge of "Sussex by the Sea." The atmosphere here has at all times a curious trick of exaggerating heights and distances, so that the successive ridges of hill—Caburn, Kingston Down beyond the Falmer Valley, Firle Beacon over Alciston, Wilmington Hill, and the high down immediately over Eastbourne and Beachy Head—taking each an added dignity, bulk large and purple as mountains against the sky, while the sea on the one side and the weald on the other vanish in one same grey infinity of space.

If the names upon the map be evidence, in no part of England can there be found, for its size, a more wholly Saxon area than this of the Downland. Of the earlier

British tongue¹ no trace remains save, as usual, in the river-names, in the "combes" which have in rare instances escaped translation into "dens" or "deans," and in the fine-sounding name of Caburn—Caer-bryn—the Fortress upon the Hill. The hills themselves are empty of all villages: eastward of Rottingdean, on the slopes overlooking the Ouse Valley, lies Telscombe at a height of 297 feet; and Pyecombe stands at 343 feet, while Upper Waltham under Duncton Down touches 375 feet; but with these exceptions hardly a hamlet ventures beyond the 200 feet contour-line, and most lie much lower. They cover all the flat land, they nestle each amongst its clump of trees in every sheltered hollow of the foot-hills, a swarm of settlements of amazing numbers, of the tiniest size, and of purest Saxon names. Along the lowest levels lie one or two "wicks"—Berwick and Southwick and Rumboldswyke; East Dean and West Dean, Rottingdean and Ovingdean, speak each of its sheltered fold amongst the hills, as do Ranscombe and Saddlescombe; but the intervening levels are strewn with a crowd of "ings" as purely Saxon as when they were first founded by adventurers landing from their sea-snakes at the heels of Ælla and his son Cissa to the storm of Anderida—Lancing² and Poling, Sompting, Worthing, Tarring, Ferring, Goring, Beeding, and Patching. Cuckmere-way there are a dozen or so of "tuns"—Alfriston and Alciston, Lullington, Littlington, Jevington and Wilmington—with here and there another further west at Preston, Hangleton and Aldrington. There are "hams" at Clapham, Patcham, and Shoreham. Stanmer and Falmer, Ringmer and Keymer, have a euphony that is their own. But all are Saxon *pur sang*, as Saxon as Chichester, "Cissa's Chester," or Worthing, or even

¹ The word "Down" itself is said to be the British *dun*—one of the very earliest of such adoptions.

² Said to represent Wlencing, the name of Cissa's brother.

Brighthelmston itself. Brighthelmston! A name to syllabize lovingly, a poet's name! The very sound of it recalls the strenuous days of Saxondom, the deeds of Brightnoth and Thorketyl, the pagan prowess of great Beowulf himself. And there are still to be found names worthy to stand beside it—Chanctonbury and Wolstonbury and Warningcamp, and above all Thunderbarrow,—all of them, be it noted, names of hills. It is curious that the favourite Saxon “burgh,” “borough,” “bury,” is rarely to be met with in village-names until one enters the Weald; and it is noteworthy too, that whereas north of the Downs there are names in plenty which recall the ancient forest—Ockley, Ashurst, Ashdown, Wiggonholt, Midhurst, Billingshurst, Hurstpierpoint and Woodmancote—such names are not to be found in the Downland proper, save in the bunch of hills above Arundel running up towards Goodwood. Evidently the more eastward Downs, and the southward foreshore too, were open land in the days of the Saxon conquest.

Smallest of the small are many of these hamlets, often no more than one substantial farm with its attendant barns and cottages, clustering so closely about the tiny church that often this seems to stand actually within the farmyard. The churches too have an architectural character all to themselves. Perpendicular magnificence, the extravagance of the Decorated time, have no place here; the dominant notes are ever Saxon and Norman and the most primitive of Early English. They have also a curious uniformity of design: small, unpretentious oblong buildings, with the most stunted of towers and shingled spires, the least of outward ornament, they look as if built expressly to defy the fierce south-westerly gales that sweep over the land. The manuals of architecture find amongst them many an illustration of early styles—the narrow window-slits with enormous inward splay, the exiguous chancel-arch, the triple lights at the eastern

end. All tell the same tale of a poor folk and few, innocent both of that commercial pride which blossomed into premature beauty at Steyning, and of the ornate ambition of New Shoreham, and still less touched by the wealth which came to those who farmed the golden fleeces of East Anglia in the fifteenth century—a folk who developed for themselves a style and a manner very much their own. It is just what one would look to find: cut off from the rest of England by the Forest to the north and the wide marshes of Romney to the east, their intercourse was rather with the Norman shore, and thence their inspiration. There is probably as much Anglo-Saxon architecture to be found in the collective churches of the South Downs as in many an entire county of the Midlands. But that belongs to far later history. The South Saxons were pagans when they came, and the forest long protected the old gods from the inevitable conflict with the Cross, the inevitable defeat. Indeed Sussex was almost the last area to be converted to the milder creed,¹ and even yet there linger on the soil some few of the old god-names: Thunderbarrow still keeps the name of Thor, and the name of Freya still survives in Friday's Church, a mound on the high Downs behind Arundel. The seventh century was probably spent ere the old gods went out. Until then the Sussex folk lived the life of true *Pagani*, and as they died were laid to rest upon the slopes of the Downs overlooking their homesteads; and few localities can boast a longer list of Saxon burials. The Downs are strewn with barrows from end to end, and everywhere the bones of the Saxon jostle those of the Briton whom he supplanted. The camp at Highdown he turned into one big cemetery, which has but lately rendered up the treasures he buried with his dead—weapons and brooches as matter of course, but therewith also pieces of

¹ The mission of St. Wilfrid to the South Saxons is dated 681.

glass-work, rare vases decorated with scrolls and figures of animals and *appliqués* of drawn glass-thread. And these finds tell still the same tale of a folk who, cut off from the north by the Forest, were compelled to turn their faces ever to the south. It is in the cemeteries of France that one must look for the duplicates of these treasures. With their kinsfolk of England they had little to do; about Chichester the old South Saxon type—tall, spare, blue-eyed and fair-haired—still meets one at every turn, scarcely modified by the flux of a dozen centuries. The names which one reads alike upon the tombstones and above the little village shops, are without change the names which the Norman scribes found amongst the men who farmed the land when Domesday was compiled.

The Saxon immigrants made their settlements about the lower slopes of the hills; the uplands they left unoccupied and unspoilt. On the broad hill-tops they grazed their herds of oxen and sheep and swine, but the homesteads lay lower down within the shelter of the valleys. As the years went on the ploughlands crept perhaps further up the southern slopes—the northern slopes are too steep ever to have feared the plough—and here and there a farmstead was built on higher ground; but no new villages arose, no new churches were built. The population of the uplands was then, as now it is, mostly the sheep and the shepherds. On the roofs of the eternal hills things are much the same to-day as in King Alfred's time; the tinkling of the sheepbells comes to one across the valleys, and here and there one still meets with some shepherd well-nigh as tattered and as picturesque as his fellows of the hills of Sicily. But mostly none pass this way; one can lie and dream a day through undisturbed upon any one of a score of hills, and from that vantage-point look down as it were upon another world. If to-day the plough seems to be pushing too far into the sweet old turf, it is very far from claiming as much ground as once

it did, nor is it likely that it will advance much further in these evil days of farming. Such interference as the Downs suffer is rather from the aggression of the idler; year by year new areas, free warren a while back to all that love the open life, are enclosed for game-preserves or laid out as golf links; yearly one finds a more plentiful crop of offensive notice-boards with the legend "No Road" or "Trespassers will be prosecuted." Like ill weeds they grow apace. By Lewes, at the Devil's Dyke, on the hills behind Shoreham, even on the southern slopes of Cissbury, the Down-land is given over to the golfer, and across the very centre of Cissbury Camp has been run an iron fence. "Sport" bids fair to kill out farmer and wayfarer too.

The Downs are always beautiful. In kind their charm varies with the changing seasons, but in degree it fails not. It is not the beauty of trees and leaves and wide sweeps of purple heather, but rather of outline and surface, of sun and shadow. Their close-wrought carpet of grass takes in spring a deeper green, in summer a crisper elasticity, and ceaselessly from March to July, from July to October, the seasons weave over it new embroideries of white and pink and blue and gold, harebell and crowfoot, rest-harrow, scabious, and wild thyme; and if the winter months lack such strong tones and contrasts, yet along the middle slopes are miracles of light and shade in the deeper pile of the shaggy wind-carded grasses, amongst which a thin sunshine trembles and glimmers as upon some fabric of white silk, rich as brocade, and yet filmy and mobile as gauze. Higher still, on the more closely bitten levels, the sapless carline thistle, with its mingled suggestions of a passion flower and a paper rose, covers amongst the litter of white flints that marks every squandered mole-cast; and the clumps of juniper, which, viewed across the combes, seem only colourless, keep always a few tufts of wine-dipped berries set in a wondrous filigree of silver, green, and grey. But it is in the plough-

lands of the hollows and lower slopes that winter's choicest colour-schemes are to be seen. Looking down upon the chequer-work of fields below, one can see in each a different tone, a special *nuance*; nay, the depth of colour varying with the depth of soil which overlies the chalk, a single field upon the hill-side will present a whole scale of colour-tones, from the pure white of its scarped headland under the shelter of the Downs to richest black or brown or red at its nether foot. Through silver greys and duns to warm velvety moleskin shot with faintest hints of lavender, and thence through every subtlest shade of rose-pink to ochreous yellow, lilac-purple or downright Indian red, the ribbed tilth is quick with colour under a January sunshine, as it is alive with flocks of gulls and black rooks wherever the teams are afield; and where the winter wheat is already sprouting, the young growth—here but the faintest discernible stippling of elusive colour, there a firmly woven repp of palest emerald, and anon already a densely wrought felt of vigorous greenery—makes always new combinations, contrasts, and harmonies, compared with which the reds and yellows of cottage walls and lichen-grown roofs are crude as an oleograph. Those fields may be no more than 300 feet below one's eye, yet the atmosphere seems to give to them the remoteness of another world, and fulfils them with colours which vanish as one tries to see them more closely. And sometimes it will show freakish effects of a kind rare in England. On some December day, when but the faintest sunlight glimmers on the Channel southward, turning to look down upon the hollow of the Weald, you shall find it brimmed like a wide lake with blue—no mere suggestion of that colour, but a downright, definite, undiluted, ultramarine blue, through which meadows and ploughlands, villages and roads and hedgerows, show as clearly and as strangely as if seen through bluest glasses. But Nature is chary of such impressionist efforts: *commendat rarior usus*.

Most characteristic of the South Downs is the scenery to be found between Ditchling Beacon and Chanctonbury Ring, both of them landmarks recognizable across the entire county; and possibly the best view-point of all is Newtimber Hill, otherwise Saddlescombe North Hill, between Wolstonbury and the Dyke. From this point one sees south to the Channel across the dip in which lies the Dyke Station; and much as the railway has done to mar the charm of the Downs, it has at any rate made it an easy and delightful excursion to Newtimber Hill. Right at one's feet lies the abrupt combe popularly miscalled the Devil's Dyke, and one sees to full effect the bold slopes and peninsular conformation of the fortified hill to the right of the combe, its summit vulgarized indeed by all the cheap paraphernalia of a holiday resort of the people—switchbacks and bicycle-railways, roundabouts, "aerial flight," and a dummy 100-ton gun—but still lifting against the sky the tremendous earthwork to which the name of the Devil's Dyke legitimately belongs, and just suggesting lower down the slighter lines of the rampart which encircles the hill-top. Westward the Downs fall with varying steepness but always grandly to the Weald, carved into bastion and bay as they were left by the waters of an immemorial sea. Next to the Dyke Hill lie successively Fulking and Edburton and Truleigh Hills, each named from the tiny hamlet at its northern foot, by which winds the white road on to Steyning. Between and behind the two last named stretches the long straight saddle of Thunderbarrow, with Lancing Ring and Steepdown beyond; and further still to the right across the waterway of the Adur, the sky-line is filled in by the great lump of Cissbury, its vallum cutting the horizon like some enormous barrow, and by the round clump of beeches filling Chanctonbury Ring above Steyning. Still further west are other masses of Down culminating in Duncton Beacon (837 ft.) above Bignor, and as one turns northward one sees Blackdown and Hindhead, the

Hogsback, Leith Hill, and the whole range of the North Downs running east by Reigate and Caterham. Full in the north foreground, across the dip through which passes the London road, stands Wolstonbury, grand as its name and coroneted with earthworks; and all beyond to the sky-line is the Weald, seeming still to be almost as dense a forest as when first the Saxons saw it. Due east is Pyecombe, and the Downs climb gently up to Ditchling Beacon (856 feet), and thence as gently down to Hollingbury and Brighton, the further hills between Newhaven and Eastbourne completing the background. It is a fine view; but there is more than the view to be seen—something of the manner in which man, purposely or not, has modified and still is modifying the scenery of these chalk hills. His purposed work need not concern us now: it is obvious enough with the Devil's Dyke and Edburton Hill Camp and Wolstonbury Camp all well in sight, Thunderbarrow and Cissbury and Chanctonbury and Ditchling in the further distance. A careful antiquary must study also man's unpurposed works, and he will not easily find better and more varied examples of the manner in which the tread of generations stamps its mark upon the hills. The old lane which climbs up the Downs from Poynings round the western side of the Devil's Dyke Hill, cuts into the chalk to the depth of many feet—so deeply indeed that it requires an effort to believe that nothing has been purposed here. But neither here nor elsewhere—and there are many such lanes along the north slopes of the Downs—have there been at work any other forces than the traffic of men and beasts and Nature's rains. A very little treading of the chalk speedily forms a perceptible trench, which in wet weather becomes a puddled gutter. The heat of summer bakes the chalky slush to hardness, the tread of traffic in turn grinds it into dust, and the first heavy rainfall that follows scours the gutter clean to the

unbroken chalk below. As the process is repeated year by year the trench becomes a deep cutting, and the deeper it grows the more the mud and the dust it makes, and the faster the scouring.¹ There are places where the trackway has bitten into the hill to the depth of 10 or 20 feet or even more, but generally it stops short at a less depth, simply because the sunken track becomes too wet and greasy to be endured. Then the traffic is merely diverted somewhat to one hand or the other, following a new track immediately parallel to the old; and the process repeats itself until, the trackway naturally following a slantwise course round the curve of the hill, there is accidentally formed a series of parallel ditches and intervening banks exactly similar to those purposely engineered by the ancient camp-builders. There is a group of such trenches and banks on the brow of Fulking Hill, so accurately reproducing the forms of old castrametation that only a close examination can satisfy one that they are not intentional.²

About Bignor, under the shadow of the more westerly Downs across which the Romans threw the Stane Street direct from Chichester to Pulborough, there survived into the last century an eerie legend that "a large dragon had its den on Bignor Hill, and marks of its folds were to be seen on the hill." Looking at the sinuous coilings of these hill-paths as they writhe up and down the slopes,

¹ The process goes on in other than chalk soils, indeed in any friable soil. Nor is it confined to sloping spots. In some localities it is vigorously at work without any assistance from man or beast, *e.g.* on the top of the granite hills at Dartmoor. The granite disintegrates quickly, and is easily washed away, especially by such torrential rains as scour these higher levels. There are hills on the Moor whose all but level tops are seamed with natural trenches so deep and wide and regular as to resemble artificial dykes, and the same thing may be seen in a less well-marked degree upon other formations, sandstone and limestone, in the northern counties.

² Another good example of the results of traffic on the chalk is to be seen on Saxon Down, north of Mt. Caburn, where converge several old trackways, cutting up the entire surface of the hill in the most extraordinary fashion.

one understands the fancy which bred the tradition, and welcomes a piece of folklore so redolent of this Sussex soil. We are rapidly killing out all our folklore, eradicating "vulgar errors," as we call them, only to leave more prosaic blunders in their place: we substitute stupidity for imagination, and ignorance for poetry. There is no dragon on these hills now; there is a gypsy self-styled, who fittingly offers to read for you the Devil's picture-books in the shadow of the Devil's Dyke.

Sussex folk seem ever to have had a leaning towards snaky things.¹ In the *Chronicle of Athelweard*, that very typical alderman and uncle advises his niece that "in those days (anno 773) some monstrous serpents were seen in the country of the Southern Angles, which is called Sussex"; and history repeating itself, in the days of James I. appeared (1614) that "strange and monstrous Serpent or Dragon lately discovered in Sussex, two miles from Horsham, in a woode called St. Leonard's Forrest." Duly furnished with scales of black and white and red, and "on either side of him two great bunches so big as a large football," this noisome visitor, on the written testimony of John Steele, Christopher Holder, and "a widow woman dwelling near Faygate," by the casting of his "venome" slew a man and a woman at four rods' distance, as well as "two mastive dogs." And reading of the discovery (1822) in Tilgate Forest of the fossil bones of the iguanodon, one wonders whether haply there was some subtle connexion betwixt the folk-tale and the fossil.

¹ To the strong contour-camp at Norton Fitzwarren, near Taunton, attaches, or used to attach, the tradition of a fiery dragon, which issued thence to devastate the adjacent lowlands of Taunton Dene. As *Y ddraig goch*, the Red Dragon, was and is still the badge of the Welsh, the tradition has been thought to embody the memory of days when the camp was a border fortress of the retreating Britons, who thence raided the Saxon settlements eastward of the Tone. The legend is so far ancient as to be perpetuated in the carved bench-ends of the village church. Similar dragon-tales are found associated with other camps of the West Country, e.g. Dowsborough and Trendle Ring upon the Quantocks.

Mr. E. V. Lucas roundly states¹ that "the hollow ways of Sussex were maintained" by the smugglers of the county, because along them the contrabandists could run their goods unseen. The Rev. S. Baring-Gould says² the same of the deeply-worn donkey-paths leading to many of the coves of the shores of Cornwall and Devon. The same notion, antedated a little, has given rise to the fables of "hidden ways" leading from Ditchling Beacon to the Weald, and from Cissbury Camp to Aplesham. It is extremely doubtful that the smuggling folk did anything more for their "maintenance" than keep them in continual use, and with Nature's help this was quite enough.

In some cases occurs a further development: a new trackway is made along the crest of the vallum already formed unintentionally between two such sunken trackways. But in this case, the vallum not being of sufficient width, the traffic cannot form yet another trench, but simply treads the bank down until it is reduced to the level of the trench on its uphill side.

Nature does her part here in helping to level the bank down; she makes no new trench, simply washing the flat floor to one level surface. In this way is produced a perfectly even terrace, often curiously regular in surface, width, and gradient, but usually betraying the method of its formation by its slanting course, if not by the traces of other trackways on the upper or lower side. One such terrace runs along and up the eastern edge of the Devil's Dyke combe, and several skirt the lower flanks of Newtimber Hill, running up the small valley from Poynings to Saddlescombe. Ascending the hill from the point where this valley debouches, one finds the slope carved into a succession of such terraces, as regular as a giant stairway, but presently giving place to more

¹ *Highways and Byways of Sussex*, p. 278.

² *Book of the West: Cornwall*, p. 263.

deeply cut trackways, one of which, paved and improved, is the modern roadway to Saddlescombe and so to Brighton. But if one follows the old tracks and terraces for a little distance westward, they will be found to be as regular and as deep as the fosses of many a camp of the first rank ; and were it not that they lie at the hill's base instead of near its brow, one would almost inevitably imagine that they were constructed as fortifications. Following the tracks in the reverse direction (towards Saddlescombe), one discovers the explanation of their exceptional size and depth, proof of a traffic unusually heavy in these thinly populated hills ; they lead, not merely to the few houses and cottages which make the hamlet, but to a very large chalk-pit in the hillside. The needs of the hamlet could hardly have formed, even in a thousand years, trenches so numerous and pronounced ; the passing of heavy carts to and from the pit speedily might, and did.

The summit of the hill is double, a very slight dip dividing the southern crest from its higher neighbour to the north. One or two barrows, much wasted, lie about the nearer crest, and further on a slight but pronounced rectilinear scarp is drawn across the dip. An inexperienced observer might at once infer that this again was the remnant of some old defences, but its directness, and still more the absence of any trace of fosse or vallum, should give him pause. It is merely the result of ploughing, for though the actual summits of the hill are perhaps unbroken turf, there is no doubt that the dip between was once plough-land.

Harder or softer, the successive strata of chalk, built up entirely of the shattered shells of tiny marine creatures, extend to a depth of a thousand feet or so, and they have stood up as hills possibly for as many more ages as were required for their making ; but the soil which clothes them, formed likewise with inconceivable slowness, is as

shallow as it is light. It breaks up easily under the plough, it is as easily washed away with the rain. This explains why there are traces of ancient tillage where nowadays no ploughshare comes. The early farmer, whose ill-wrought ploughs of shallow draught¹ were drawn by teams of little power, found it a lighter task to farm these penurious slopes than to grub up the immemorial forest and plough the deeper soil of the lower lands; but once the protecting web of turf was torn from the soil by the plough, Nature set herself in turn to tear the soil from the chalk beneath. Year by year the rains washed it down the slope, and the steeper the slope the greater was the wastage, the soil moving always downward from the upper end of the field to the lower. At the upper end its constant shrinkage caused the headland of turf beyond to rise ever higher and higher; at the lower end its constant accumulation gradually built up a scarp, exactly as a navvy's "tipping" builds up an embankment that shows always the same slope although its height grows daily greater. One may see the same forces at work to-day; in one and the same field the upper end is already turning white as the chalk comes ever nearer the surface, while the lower end has the rich dark colour that tells of a deeper soil. Go nearer, and you will find the whole field strewn thick with flints; but whereas at the one end the flints are still bedded deep

¹ On many of the older farms may still be seen the peculiar plough best adapted for use upon such soil; the share, very shallow in draught, has no right or left, but is simply whale-backed, and the plough-beam is carried on wheels which have spokes of wood but no wooden rim, this being replaced by a simple narrow strip of iron fastened directly to the spoke ends. In the museum at Lewes is preserved what claims to be the oldest surviving plough in the district: it shows both the above peculiarities, and further has a coulter of wood. The use of oxen for ploughing still survives in the genuine Downs. Until three years ago ox-teams were to be seen at work at Landport Farm, within a mile of the county town, and actually next to the railway. The cattle used are a heavy black Welsh breed—said to make capital beef when no longer fit for the plough!

in soil, at the other end they lie almost naked upon the naked chalk. With every successive ploughing the white grows wider and more white, the dark grows smaller and less dark, until the whole field washed bare, it is left a patch of stony aridity to revert again to turf. On lower levels and other soils can be seen the signs of old-time cultivation in the regular alternation of "lands" and "furrows" which underlie the green surface of meadows already old; but on the Downs there is not soil enough to leave such tokens. The headland and the scarp are all that remain to tell that here was once a plough-field. Sometimes these scarps are so slight as to be scarcely noticeable; sometimes they reach an extraordinary size. There is a notable one on the eastern brow of Rookery Hill, Bishopstone, so bold and conspicuous as to give to the whole hill-top, when seen from that side, the exact appearance of a hill-fort almost obliterated by cultivation; so that on these chalk hills, oddly enough, whether the plough be breaking up virgin soil or be levelling up the mounds and trenches of some ancient stronghold, there comes a moment at which, to the casual eye, the results are in appearance identical, and a closer observation is needed to determine whether it is a case of a camp's decay or a plough-mark's growth.¹

¹ Blewbury Hill, Blewburton, Berks, is an apt illustration. It is marked upon the maps as a "Danish Camp," apparently merely because of its oval contour—an isolated chalk hill lying nearly east and west. "Around the hill are two parallel steep escarpments forming terraces, and on the north side are three more rows, while several fragments may be seen on the south" (H. T. E. Peake, in *Vict. Co. Hist. of Berks*). But there is "no sign of any ditch round the hill, nor any tradition of a fort here"; so that it is very doubtful whether these scarps be not the result of ploughing, "a construction very noticeable in other parts of the county." Possibly, however, like Brent Knoll, this is an instance of a fortress defended chiefly by escarpment, with little or no trenching. Only excavation can solve the doubt. The writer picked up on the level hill-top (1906) a portion of a broken celt of perfectly white flint beautifully polished. There are good examples of a terrace produced by the ploughing out of a vallum at Desborough Castle, Bucks, and at Bathealton, in Somerset, and something similar at Ranscombe Camp, next to Mount Caburn.

If the slope of the hill be very long and regular, it was naturally ploughed piecemeal, for ancient farming was content with but small fields. In these cases, each field making its own scarp, there results a succession of more or less level platforms, their area varying as the slope is more or less gentle, which rise one beyond the other to the point at which cultivation ceased. Upon the long flank of Combe Hill, sloping down to Jevington, is a series of seven or eight such platforms, now grass-grown again. In this way too were formed the narrower lynchets of still earlier cultivation. And finally where, while the flanks of the hill had been too steep for cultivation, its more level top has passed under the plough, the result is analogous; the broken soil, shifting always towards the edges of the plateau, and ceaselessly washed over them, forms undesigned scarps along their length. All along the northern brow of the tongue of Downland which runs westward from Knapp Hill towards the Cuckmere, is a scarp thus artificially formed, the height of which bespeaks it the accumulated result of the seed-times and the harvests of centuries.¹

This same "law of the downward drift" of the soil—to parody an accepted geological expression—is answerable for other effects with which man has no concern at all. One of the most noticeable features of the turf-grown slopes of the chalk hills is the peculiar striation of the surface, the grass in many places not growing smoothly and evenly, but in more or less parallel rows, like diminutive terraces. This effect is usually more marked the steeper the slope, and the explanation is easy. Seeds do not easily make good their root-hold upon a naked slope of steep chalk, the scour of the rains tending to wash them out. When, however, some more vigorous

¹ The same phenomenon is to be seen equally in gravelly soils, *e.g.* in the Yorkshire Dales, where natural terraces and accidental plough-terraces are abundant.

plant has secured a hold, Nature sets to work again ; the soil from above is washed down upon the tuft of grass and lodges there, while the soil below it is simultaneously scoured downwards, the result being the formation of a miniature escarpment under the tuft of grass. Other seeds quickly plant themselves about, and each similarly forms its tiny embankment. These ridges are generally horizontal, less frequently running down the slope diagonally, and though seemingly parallel, they really run one into another like the cords of a net stretched cross-wise. When snow lodges thinly in such a slope the effect is very beautiful, the dark ridges of grass showing up boldly against the thin white lines between. The tiny terraces find favour with the rabbits and the sheep, who form their own trackways amongst them, treading them to larger size, and inviting the shepherd to follow. His big boots speedily produce their effect, the public follows, and ere long the Ordnance Surveyors have a new footpath to lay down.

“The Downs are dead,” says Mr. Clement Reid. Yet it would be hard to find a tract in which the eternal flux of things is more visibly alive and more vigorously at work. The processes of change, in which man and beasts and incorporeal Nature all play their part, are going on ceaselessly. From end to end the hills bear their traces, and the signs of the cultivation of centuries gone by are still plainly obvious on many a slope long since restored to the wilderness. Without a doubt many of the terraces by geologists styled “sea-beaches” were produced by agriculture, and not necessarily by any very ancient agriculture. That primitive man did break up and till the hill-sides and so in some cases form the terraces called lynchets is certain ; instances are known in which there can be seen the remains of the retaining walls of stone wherewith he banked up his hard-won glebes. But though there are traces of similar lynchets

in plenty on the Downs—at Telscombe, at Cissbury, at Ranscombe—there are no vestiges of any such walls. They were not needed here on the chalk, for Nature herself helped to make the necessary terraces. She is helping to make them still, so that no rash conclusions must be drawn as to the age of such phenomena, even as there is no need to romance about the deep-worn trackways—bostels as the Sussex folk call them—of the hillsides. They are not the work of smugglers or of Romans more than of any other men of any other race that has trodden their surface. Nature made them, and Man, whether Saxon or Roman or Briton, was Nature's instrument. She has used each in turn and flung it aside, for she is still the mistress here. Nowhere does the wild clematis bloom so luxuriantly, nowhere do the butterflies find such sheltered haunts, nowhere does the later-day wayfarer find such solitudes of sweet scents, sweet sights, and sweet sounds as in these undated, unfrequented Sussex bostels.

CHAPTER XIX.

THE SOUTH DOWNS (*cont.*)

*“ What sign of them that fought and died
By shift of sword and sword ?
The barrow and the camp abide,
The sunlight and the sward.”*

FROM forsaken Amberley, on the eastern bank of the Arun under the northern slope of the Downs, to their extreme point at Beachy Head is a crow-flight of some 35 miles. Taking as their northern boundary the abrupt scarp on that side, and elsewhere the 50-foot contour-line, the area of the Down-land from point to point is approximately 130 square miles. With the like boundaries the western section from Arundel to Havant comprises perhaps 90 square miles more. But as this western section is of somewhat different character from the other, and as it is doubtful to what extent it was in ancient times covered with forest, it is more convenient to leave it out of consideration here. Confining ourselves to the eastern and larger section—or rather sections, for the river-valleys break up the area into five distinct parts—we have within an area not exceeding 130 square miles no less than twenty¹ camps. Of these the greater number are unquestionably British : in some cases the fact has been proven by

¹ This estimate does not include the minor and less obviously defensible enclosures near Falmer (Fig. 38, and p. 147, *ante*).

excavation, and in others it is a legitimate inference from other evidence. Admitting, however, that Burpham Camp is certainly of later date, that the odd work in Ringmer Holt is dubious, and that the lines on Steep Down scarcely deserve to rank as a camp at all, there still remain seventeen sites, which would give to each an average territory of rather more than $7\frac{1}{2}$ square miles, or as much as would be comprised within a circle of $1\frac{1}{2}$ mile radius.

But it is not possible to prove that all these seventeen fortresses were contemporaneously occupied: there is, on the contrary, evidence that some had ceased to be occupied before others had been built. This is almost certainly the case with the adjacent fortresses of Ranscombe and Mt. Caburn. On the other hand it is at least possible that there once existed other camps, of which the traces are now altogether destroyed or are as yet unnoticed; and that this latter is no absurd suggestion even in these days is proved by the cases of Ringmer Holt, which remained unnoticed until 1898, and the enclosures at Falmer, first described in 1907. It is more than likely that the broad stretch of high down between Falmer and Newhaven had its share of camps; it is scarcely credible that so commanding a height as Firle Beacon (718 feet), or Five Lords' Burgh and the hills between Iford and Alfriston, were left unoccupied; and the same remark applies to Windover Hill between Wilmington and Jevington. If camps appear to be too many between Thunderbarrow and Ditchling, they appear to be too few in all the areas above mentioned. But confining ourselves to facts only, so far as these are known, let us admit that of the seventeen camps presumably British, not more than a dozen were contemporaneously occupied. There would then be for each an average territory of 11 square miles. If it be remembered that in British times everything below the 200-foot line was probably jungle or swamp or both, and that the prehistoric folk, whose only wealth was their cattle, must





needs confine themselves to the open country, it would seem that a nominal territory of 11 square miles would be none too extensive ; so that, even with this handsome concession made, it is still clear that the Downs were thickly populated in the prehistoric period. The immense number of tumuli scattered about the hills bears out the same view.

Counting from west to east, and from north to south, the complete list of camps is as follows : ¹—

- A. WORTHING GROUP :—i. Burpham, ii. Harrow Hill, iii. Highdown, iv. Chanctonbury Ring, v. Cissbury, vi. Steep Down.
- B. BRIGHTON GROUP :—vii. Thunderbarrow, viii. Edburton Hill, ix. The Devil's Dyke, x. Wolstonbury, xi. Ditchling Beacon, xii. Hollingbury, xiii. White Hawk Hill, xiv. Newhaven.
- C. CABURN GROUP :—xv. Ranscombe, xvi. Mount Caburn, xvii. Ringmer Holt.
- D. SEAFORD GROUP :—xviii. Seaford.
- E. EASTBOURNE GROUP :—xix. Beltout, xx. Combe Hill.

Burpham Camp (Fig. 212) appropriately stands first as the one unquestionable example of a promontory fort, and, moreover, a very striking example. It occupies the whole of a narrow tongue of land jutting out southward from the Downs into the water-meadows of the Arun. Its extreme length is 800 yards. At its base 800 feet wide, it rapidly narrows to no more than 200 feet, gradually expanding again to 500 feet in the lower half. The area, now under plough, is seemingly level, but as a matter of fact the 50-foot contour-line shows that the eastern edge and the southern extremity have a very slight fall towards a small stream which descends from the north-east to the Arun. The sole artificial defence is a gigantic earthen vallum, with exterior fosse, crossing the neck of the peninsula, with an entrance at the middle. The

¹ No account is here taken of dykes, of which there are several, *e.g.* on Wepham Down and near Washington ; nor of Roman settlements and villas, &c., of which also there were several. South of Fulking Hill, a mile south-west of the Devil's Dyke, the Ordnance Map marks a "Supposed Roman Settlement." All that is now visible, if more ever existed, is a series of plough-marks.

vallum does not follow a right line, but forms an obtuse angle at the entrance. The eastward section runs some little way down the slope towards the stream; the westward section ends abruptly upon a scarp—cliff is too dignified a word—which constitutes the only defence of

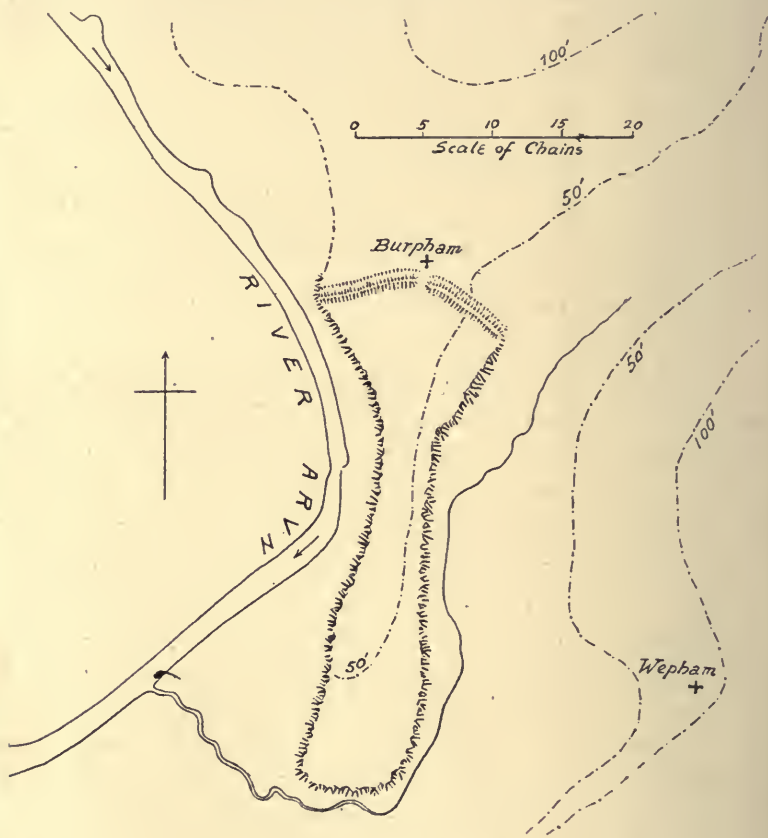


FIG. 212.—BURPHAM.

the camp on the remaining sides. The inner slope of the vallum, which is extremely steep, measures 36 feet at the centre, its base being 75 feet in breadth; the outer slope falls much lower to a deep and wide fosse, now occupied by buildings and gardens. The village clusters close

under the outer face of the vallum, the church being but a few yards away.

There is little doubt that this work is of late date—later probably than the foundation of the church, for had it been earlier the church would by all analogy have been found within the area. The vallum is to all appearance but little weathered: its slope must be as abrupt to-day as when it was first raised, and its crest is remarkably level; whereas, with few exceptions, valla of great antiquity will be found to be weathered into very irregular humps and hollows. Again, the camp lies at too low a level to be of very great age, for in the prehistoric period much of the area must have been under water, and the whole must have been so little above water-level that it must have been necessary to raise some sort of vallum all round the area, if not for defence, at any rate to safeguard the flocks from falling into the river, which at that date made the camp in reality a peninsula. Finally the area, though littered over with flint, has so far, it is said, furnished no *reliquiae* at all, a fact which at once refutes the theory of any long tenancy by a people of the Bronze Age or earlier. For these reasons it is safe to suppose that it is not a British work. For reasons as obvious it is not Roman. It has no known characteristics of Saxon work, and had it been such, the church would certainly have been within the vallum. It must therefore be either Danish or Norman. To Norman work it has no resemblance, and the conclusion is that it is Danish. Such is the local tradition, and when one finds a genuinely ancient tradition it is always wise to treat it with respect. In the Danes' time the Arun ran more broad and deep than now, and they might easily run their *ceols* up to the very foot of the camp.¹ An

¹ At South Stoke, 1½ mile above Burpham, was found a British boat in 1834, and another was found actually at Burpham. In one of them was an anchor made of oak, one of the rarest possessions of the Museum at Lewes.

adjacent hill to the south-east, bearing the name of Warningcamp, was perhaps once a signal-post whence the Saxons watched the movements of the unwelcome invaders.¹

Harrow Hill, $2\frac{3}{4}$ miles to the north-east, is a steep and isolated hill at the head of a broad valley opening to the south. Rising some 200 feet above the ground about, its height is sufficient (549 feet) to give it a wide view seaward over Angmering Park and in a straight line over Patching Church to Highdown Camp, but in all other directions the surrounding Downs ring it closely about. Wepham Down to the west completely hides the Arun valley; northwards the long ridge from Rackham Hill to Highden Hill attains to very nearly 700 feet, only dipping at Findon Gap to allow a sight of Chanctonbury Ring, four miles to the north-east; while the dreary lump of Blackpatch closes in the view due eastward, blocking out all but the very crest of Cissbury Ring. The camp, modest in plan and size—it measures only some 200 feet by 150 feet—covers only about $\frac{3}{4}$ acre, with a single vallum and ditch, both greatly minished. The entrance, to the south-east, shows no trace of extra defences. The ground immediately outside the fosse to the north-east is much broken by circular pits, some of them large. These pits are a common feature of South Down camps, and in most cases were made in the search for flints, as at Cissbury and other places. The area has been little disturbed except by the traces of some old building, probably a cattle-shed. The mole-casts show the usual fragments of rude pottery and abundance of horses' teeth. It is not needful to imagine heathen Saxondom assembled here to make sacrifice to Woden. On this spot have been buried, perhaps, the bones of the dumb servants of the thinly scattered farms about. Whether it be no more than a mere whim, or a genuine

¹ The corresponding spur of the Downs, $1\frac{1}{4}$ mile north of the camp, is known as Camp Hill.

case of the unconscious survival of an ancient custom, certain it is that the old-fashioned Englishman loved to bury his dead animal friends, as once his forbears their humankind, "in the high places." Such "secondary interments" have to be allowed for by the archæologist, and he must not take it for granted that every bone or every barrow is as old as the camp wherein it is found.

On Lee Farm (300 feet), under the north-west slope of the hill, are several large ponds, and immediately under its steep western face are the traces of another, long since abandoned. The north-east corner of Wepham Down is deeply scored by cattle-ways leading to such a pond, but about Harrow Hill itself there are no such tracks. The terraces and banks which mark the foot-hill to the south-east are of modern causation. On the western side of Wepham Down is a large and high vallum of some length, bending at a right angle and resembling a boundary dyke, but of unknown date and purpose.

Highdown Camp (269 feet) occupies the top of a depressed spur of the chalk, which projects like a peninsula into the surrounding flatland, $1\frac{1}{4}$ mile north-west of Goring Station. A contour fort (Fig. 213), it accidentally has the form of a regular parallelogram with carefully rounded angles. The area is small, but the defences were originally strong to the south and east, where a very broad vallum runs round the brow of the hill, with a wide and deep fosse at its foot, and beyond this a parapet of same size. Both banks disappear after rounding the north-east and south-west angles, the slope of the hill to north and west being very much steeper than elsewhere. At the south-west corner the vallum broadens inwards so as to form a wide level platform. Such platforms are not unusual in other camps, but in this instance the explanation is that the vallum was levelled here to make room for a windmill. The original entrance was at the

north-east corner, the gap in the south wall being probably later. A chalk-quarry has cut away much of the parapet and fosse on the eastern side, and the area is now partially planted with firs. A footpath leads from the camp south-eastwards to the Goring road, past the lonely tomb of the Miller of Highdown in the next field; and a wet and ill-made lane runs northward through the woods to the Arundel-Worthing Road.

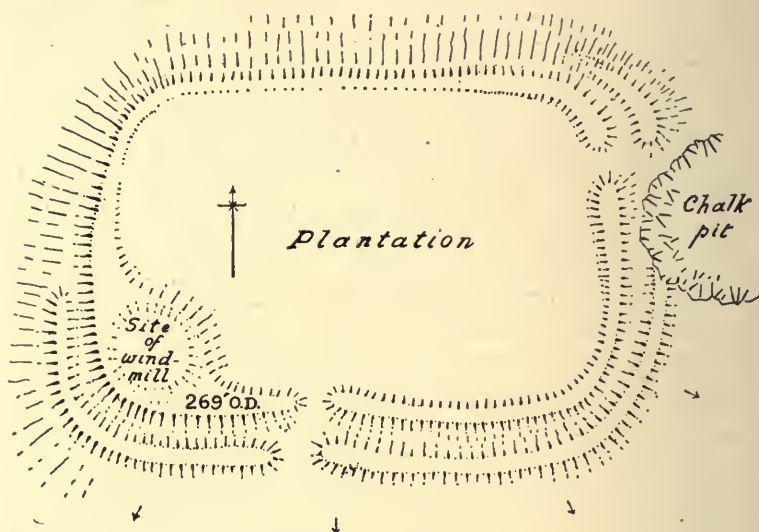


FIG. 213.—HIGHDOWN.

When partially explored by Pitt-Rivers, the few objects which the camp yielded were all of later character than those found by him at Cissbury. There were very few flint implements, pottery of comparatively late date in some quantity, and a delicate bronze knife-blade, socketed, and furnished with two rivet-holes for securing the blade to the handle. But finds of greater interest were made recently, when a Saxon cemetery was opened and a number of very fine specimens of glass-work taken from it.

Four miles due north-east from Highdown, and 3 miles north of Worthing station, upon a hill reaching

603 feet, stands Cissbury Ring, by far the finest of all the camps of the South Downs, both in extent and in the size of its defences. Strictly conformable to the hill, its shape (Fig. 214) is somewhat that of a Roman *ancile*, the larger axis lying north-east and south-west, and it encloses an area of not less than 60 acres, as great as that of many works of the very first class. The slope of the hill on the

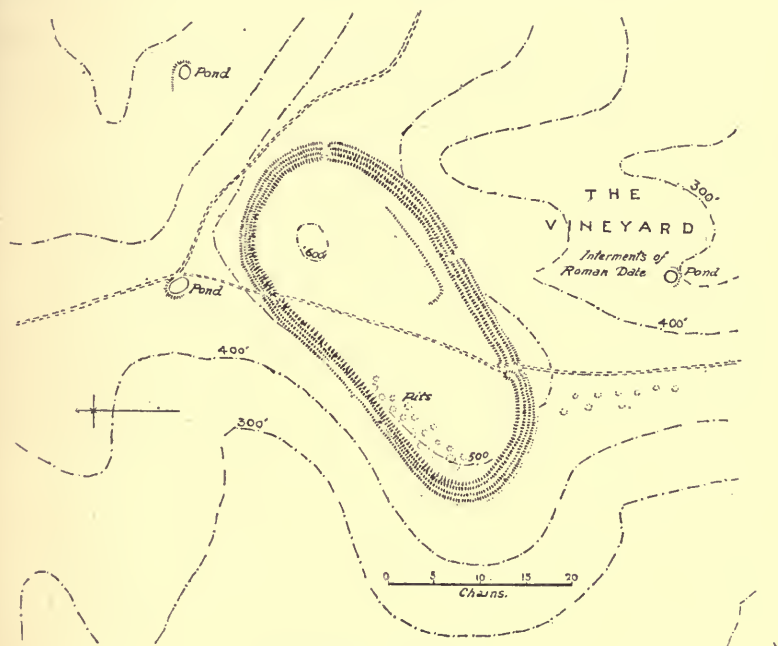


FIG. 214.—CISSBURY.

north-west is so abrupt that for some 250 yards the camp is sufficiently protected on this side by a single vallum and fosse, and fine as these are, excavation showed that owing to the steep fall of the ground a relatively small amount of labour was expended in their construction. Everywhere else—and the entire circuit is $1\frac{1}{4}$ mile—the vallum and ditch are of far greater size, and a considerable parapet follows the outer edge of the fosse. Where the lines cross the actual crest of the hill, at the north-eastern

corner, the huge inner vallum, seen from a distance, stands up against the sky-line with the appearance of an enormous conical tumulus, well known to the local shepherds as Cissbury Knot. From this point for some little distance to the south-east, though the slopes on either side are formidable enough, the ridge of the hill is fairly level, and along it, across the head of the natural amphitheatre under the southern slope known as the Vineyard, runs a trackway towards Lychpool Hill and Lancing. It enters the camp by a gap in the defences immediately north of the Knot, but the main entrance was at the southern end, where terminates the long and gentle slope up from Broadwater. On either side of this gate the vallum is raised considerably above the general height. The road from Broadwater is continued northwards across the area in a grass track, which passes out by a third gap in the lines in the direction of Chanctonbury Ring, $2\frac{1}{2}$ miles to the north. This gap is a mere postern, and the path does not cut both ramparts directly, but after passing the inner vallum swings to the right along the fosse for a few yards before crossing the outer parapet, being thus enfiladed throughout. It passes a fine pond at the foot of the slope, and so goes northward along the ridge of the hill between the 400–500-foot contours. There is a fourth gate, again a postern, near the middle of the south-east side of the camp, opening straight upon the steep slopes of the Vineyard.

Saving only the great vallum of the Devil's Dyke, there is no earthwork in the South Downs to be compared with the huge girdle of Cissbury, of which the inner vallum still rises in places nearly 40 feet above the floor of the fosse, and more than 20 feet above the area within. Pitt-Rivers declared that under ancient conditions of warfare 5,000 men must have been needed effectively to man the ramparts. Under modern conditions a fifth of that number could hold it against long odds, and there is

room for the emplacement of the largest guns. Approaching the camp from the north, the writer once climbed to the very crest of the parapet before he was aware that 500 regulars were lying comfortably at ease within the northern fosse, absolutely invisible to the outer world.

Pitt-Rivers was the first to attempt the exploration of the camp, excavating portions of the defences and some twenty-five of the pits which, large and small, cover the western half of the area. He concluded that these pits were formed in the search for flint. Varying in diameter from 20 to 70 feet, all had basin-shaped floors, strewn with a profusion of flint flakes and implements in every stage of manufacture. When the original flat floor of the fosse was bared, there were found lying upon it flints of the same types. Subsequent excavations confirmed his conclusions, and revealed shafts sunk through the floors of the larger pits, exactly like those in the old flint-workings (Grime's Graves) near Brandon, one pit being thus connected underground with another like burrows in a rabbit-warren. It was further found that the rampart had been thrown up over similar pits, thus proving that the site had been frequented by flint-miners before the construction of the existing camp. Neolithic man in very early times found the flint of the spot peculiarly suited to his requirements. A fine black stone of the very best quality, he handled it with a skill begotten of long practice, and the whole surface of the camp, area and ramparts alike, is strewn with flakes innumerable, and a careful search will generally find a specimen or two of the finished implements. These are of certain definite types quite familiar to the experts in such matters, and it is very rarely indeed that any trace of polished workmanship is discoverable. The principal output seems to have been rough celts, possibly intended for agricultural use; such warlike products as arrow-heads and lance-heads are rare. Pitt-Rivers found no trace of metal, but subsequent

investigators have discovered both bronze and iron. Cissbury owed, and amongst archaeologists still owes, its celebrity to its flints, in so much that it has been dubbed the Sheffield of the Flint-industry in Neolithic times. The pits extend beyond the defences for many yards alongside the roadway to Broadwater. In the face of the evidence it is idle to discuss the theory which would regard the work as "Druidical, erected for religious purposes," or that which believes it to have been built to serve the purposes of a folk-moot, or, finally, those which would attribute the earthwork to the Romans or to the Saxons of Cissa.

In the north-western portion of the area have been found remains of Roman character, and interments of the same date were found in the valley called the Vineyard, but there is no evidence of any permanent occupation of the spot by Roman troops, nor is it probable. Within the area are faint traces of what might be a rectangular enclosure which has, without any justification, been dubbed a Roman camp. It is quite possibly the result of ploughing in recent times, for the eastern half of the camp is not cut up by any such great pits as cover the western portion and there make cultivation impossible. Cissbury is one of the oldest, if not actually the oldest, camp upon the South Downs: it is a work of the Early Neolithic Age.

The rabbits are busy about the southern defences, and their burrowings bring to light fine specimens of implements which have been buried deep within the ramparts. This gives colour to the belief that the defences may have been altered or enlarged by peoples who attached no value to flint implements, or at least to those of the Cissbury types. But it is hopeless to attempt to identify those peoples. The Saxons must have had to fight for the possession of a fortress so strong against a race so obstinate as the Britons: it took them fourteen years to clinch their conquest of this narrow strip of Downland by

the storm of Pevensey. But we have no record of the struggle. The notion that Cissa, the son of Ælla, made the camp his headquarters for a time has no other basis than the similarity of names; but it would seem that, if really named after Cissa, the camp should be called "Chissbury,"¹ exactly as Cissan-cestre, unquestionably derived from his name, has taken modern shape as Chichester.

The name of the Vineyard is rashly asserted to date from the Romans' time. The slopes of this little hollow in the hillside are carved into a series of terraces, the "level platforms of which vary from 130 to 150 yards in width, and the rises vary from 10 to 20 feet."² These are thought to have been made expressly for vine-culture, whence the name of the spot. If they were ever so used by the Romans, it is odds that all memory of the fact would have been lost, and the name with it, in the desolation of the Saxon conquest; but on the other hand, viticulture was practised in England far down the Middle Ages, and the name may have been applied merely because of the resemblance between these terraces and those of genuine vineyards elsewhere. But when all is said, they have just the appearance which commonly results from normal ploughing on the chalk downs, and nothing in

¹ There is a camp called Chisbury near Great Bedwyn, in Wilts, five miles west of Hungerford, of which Murray says flatly that it "takes its name from Cissa, the son of Ælla," whose headquarters, as Ealdorman of Berkshire and Wiltshire, were at Great Bedwyn. It is an oval camp of 15 acres, "one of the finest specimens of castrametation in the county," enclosed within single, double, and treble lines. For a discussion of the phonetic value of Anglo-Saxon *c* and *ch*, and their modern equivalents, see a paper by Rev. A. C. Yorke, in *Proc. Camb. Antiq. Society*, No. xlv.

² Messrs. Hubbard, *Neolithic Dewponds and Cattleways*, p. 6. The authors regard the terraces as "wolf-platforms," constructed as "an efficient defence, if necessary, against wolves coming up the valley." Could the neolithic wolf be relied upon thus to make only frontal attacks? If he was bold enough to attack at all, would he make much account of such defences? And would he preferably make his rush just where the approach was steepest?

their presence need import any high antiquity. On the other hand, if it be admitted that Cissbury was a permanent settlement, there is no reason why its inhabitants should not have made the terraces in their primitive farming. Where should they more naturally have put their garden-patches than within the shelter of this little valley with its warm southern aspect?

Besides the great flint-pits above described, the area of the camp is marked by other *vestigia*. Some of these are the shallower pits left by hut-dwellings, mostly circular in plan, while others are rectangular. Pitt-Rivers opened some of the latter, and, satisfied that they were old, suggested that they may be the sites of guard-houses to cover the gateways.

The trackway which leaves Cissbury by the postern in the north-western side of the camp, developing into a many-rutted cart-road, reaches in $2\frac{1}{4}$ miles the clump of trees—they are not all beeches—which crowns and hides Chanctonbury¹ Ring. Jutting out from the general line of the northern scarp of the Downs, the hill (814 feet) dominates for league upon league the densely wooded level of the Weald, so that no landmark is better known, no mental impression of the Downland more enduring than that afforded by the Ring. The northern slope of the hill is so steep that, standing upon its brow, one sees but a few yards only of the downward slope of 400 feet, and winter or summer the short turf is so extremely slippery that the attempt to climb up the slope, save by the recognised paths, is an arduous undertaking. Immediately to the south the ground falls away almost as steeply, if to a less depth, to the combe known as Well Bottom, leaving to right and left a narrow ridge of high ground more or less level, which links up the Ring with the adjoining hills. At its narrowest each ridge is but

¹ Domesday mentions Cengeltune, a manor of Washington, lying in the Weald, a mile north of the Ring.

200 yards across, while the central platform, whose summit the Ring marks, is at widest 400 yards across. The stronghold was therefore accessible only along these ridges, and its builders took full advantage of their position. The actual camp (Fig. 91) is but a small work; strictly conforming to the hill, it is approximately oval in shape, measuring about 500 feet across the longer axis (N.E.—S.W.) and 400 feet across the shorter (N.W.—S.E.). The single vallum reaches perhaps to the height of 12 feet above the bottom of the ditch, the gate, a mere gap in the ring-wall, being to the south-east. The thick growth of trees—only planted in 1760—makes impossible any complete view of the whole area, which is between three and four acres in extent.

These inconsiderable defences are reinforced by additional works which cover each of the two approaches. At a distance of 380 yards from the Ring each ridge is traversed by a bank and ditch, which cuts it right across. That to the south-west, some 300 yards long, follows almost a right line just where the ridge is narrowest. That to the south-east, rectilinear at its commencement upon the brow overhanging Well Bottom, conforming presently to the curve of the hill, sweeps boldly round to the left and so returns to the northern brow above the Weald. In each case the ditch is on the outer side.

This is the best example to be found in the South Downs of a fortress covered by subsidiary works. The Ring can never have sheltered a large community, for it is too small; but that it was an independent fortress, and no mere outpost of Cissbury, is shown by the subsidiary defences, which face towards the greater fortress. The area included within the outlying works, if small, is large enough to accommodate a considerable number of cattle for the short period during which any leaguer could be maintained in prehistoric times: in times when no danger threatened there was room and to spare for any flocks to

graze over the broad level hill-tops beyond the outworks. Three low mounds may with some difficulty be traced outside the entrance to the Ring. The pleasing melancholy fancy that these must necessarily be tumuli was long ago challenged by excavation. Pitt-Rivers opened them and found no trace of any interment, but on the other hand found within them fragments of Roman tile. Two other mounds lie outside the entrance-gap which affords passage through each outwork, and three others again between these and the Ring. Pitt-Rivers, who had observed similar mounds at Mt. Caburn, was inclined to think that these were part of the original defences. At the present time there are two dew-ponds on the plateau: one, the smaller, is made actually in the mound which covers the south-western outwork; the other, very much larger, lies within the curve of the outwork to the south-east. The former is not forty years old, the latter certainly no older. A "bostel," or track, known as "Heaven's gate," leads down the steep face of the hill to a good spring on the north-east, and Well Bottom takes its name from an ancient well at its head, just below the 600-feet level, which Pitt-Rivers believed to be Roman. Roman roof-tiles and other *reliquiae* have been found within the Ring itself. It is improbable that any Roman should have made a permanent residence within the Ring; it is quite probable that one of them may have built here a sort of summer-house, for the Roman had as fine an appreciation of a view as ever had Richard Jefferies himself, who so loved this noble hill and its wide horizon.

From Chanetonbury a shepherd's track, following for $3\frac{1}{4}$ miles the main ridge of the hill to the south-east, leads gently to the foot of Steep Down, 350 feet below the Ring. Like Harrow Hill, Steep Down is an isolated lump of no great height (449 feet), but the rapid fall of the ground upon its flanks east and west amply justifies its

name. To the south it bifurcates, one arm running south-east to the round coppice called Lancing Ring (343 feet), the other leading towards Sompting. The shepherd's path follows the steep eastern flank past Lancing Ring and College to the Adur at Old Shoreham Bridge. The top of Steep Down embraces perhaps 60 acres, and from its highest point, marked by a low mound, one has a fine view of Cissbury, 2 miles to the west, of Chanctonbury in the north-west, of Thunderbarrow, $3\frac{1}{2}$ miles

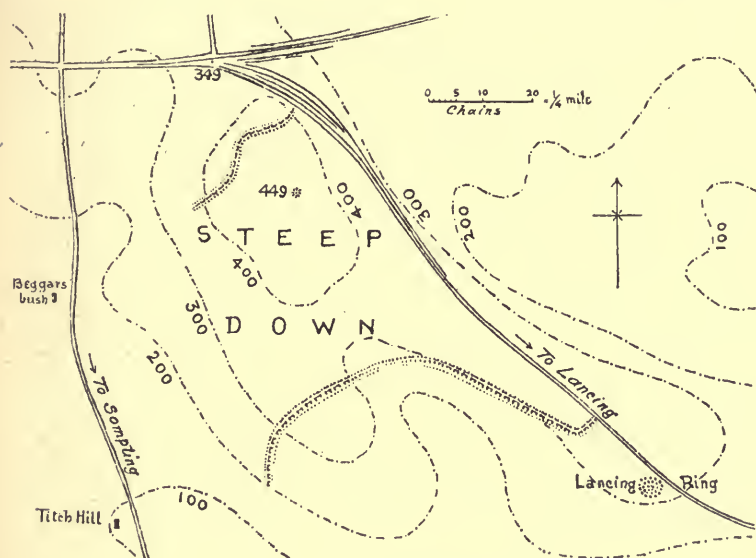


FIG. 215.—STEEP DOWN.

east across the Adur, and over the whole of the level foreshore southward from Worthing to Brighton. Crossing its southern slopes the Ordnance Map shows (Fig. 215) an entrenchment known as the "Roman Ditch," and a second and nameless work of the same kind covering the brow of the Down to the north-west. There can be little doubt that these earthworks represent another settlement analogous to that of Chanctonbury.

The northern ditch is a very small affair: of little depth,

and with a slight vallum on the upper side, it winds round the edge of the hill, turning with very pronounced angles at either end down the slope to the west and to the north, very much as does the south-eastern outwork at Chanctonbury. Its total length is some 700 yards. At its western end it disappears on the slope towards Beggarsbush; the northern end, running diagonally down a steep slope, becomes lost in a series of banks and trenches which score the hill's foot with all the appearance of earthworks, but are in reality nothing but the marks of old trackways; the routes from the coast towards Steyning and Chanctonbury here meeting and crossing other routes from the once populous Coombes and Botolphs towards Cissbury and Findon. The slope above the trackway to Lancing, too steep to require any artificial defences, has no ditch, and the same is true of the less steep slope on the west. The southern side is completely covered by a very much more formidable earthwork which runs in a wide curve from a point on the Lancing path a few yards west of Lancing Ring, until it disappears, like the other, on the westward slope opposite Titch Hill Farm. This wall is about $\frac{3}{4}$ mile in length. Commencing at right-angles to the Lancing path—and there is no trace of its further continuance down the slope north-eastward to Cowbottom—it takes within 20 yards a right-angle turn to the right at the edge of the hill, and follows this gently down to the small combe which bifurcates the southern end of Steep Down; then climbs directly up and across the westward bifurcation, and swinging gradually round, vanishes at a short distance below its crest.

At the eastward end the vallum is perhaps 3 feet above the fosse, but gathering size as it proceeds westward it rises to 4, 5, and even 6 feet, and the fosse broadens to as much as 20 feet. Midway in the straight portion is a gap opening to the combe, and where the head of the

combe is crossed, the slopes being very steep, vallum and fosse diminish again until they are scarcely traceable, and perhaps they never existed here, where was once a considerable watercourse; but on the ridge beyond they reappear as large as ever, and before denudation had wasted them, must have been a formidable defence. Fragments of coarse pottery and flint flakes cover the ground between Lancing Ring and the ditch, but there are no determinate traces of any habitation in the area enclosed by the two lines of earthwork, unless some slight depressions on the summit of Steep Down be accounted the pits of old huts.

On the lips of the shepherds the name of "Roman Ditch" becomes "Roman Paths." The attribution to the Romans seems to be as baseless as it usually is, although there were found on Lancing Down in 1828 the poor remains of a villa's tessellated floor, on which, amidst a pile of ashes, lay "25 pieces of Roman, Ancient British, and Saxon coin"¹; and in the vicinity were opened 35 graves, which yielded a number of Romano-British relics. In the valley near Lychpool farm, midway between Steep Down and Cissbury, is an ancient well believed to be Roman. But these remains throw no light upon the date of the earthworks, which have all the appearance of far greater antiquity, while their general disposition bears some analogy to those of Chanetonbury. The absence of any signs of an inner stronghold is curious but not unparalleled.

All the camps thus far described lie within a day's walk, amidst some of the finest and remotest scenery of the Downs. To this remoteness they owe in part their preservation, and it is a fortunate accident that they possess so varied an interest—from earliest Neolithic to Danish work. The camps of the next group, though on

¹ *Gentleman's Magazine*, 1828. A later report (*ibid.* 1830) speaks of Roman and British coins only.

the whole less well preserved, are more numerous and quite as interesting.

The poor traces of Thunderbarrow Camp lie on the saddle of a long ridge of down running from Truleigh Hill (669 feet) southward to the coast at Kingston-on-Sea, that ugly little hybrid of suburb and fishing-village, where the Adur at last escapes to the sea. The ridge rises so gradually that its real height may easily be underrated: exactly 2 miles north of Shoreham Station it humps modestly to a height of 486 feet, and on this hump once stood the camp. The plough has passed over the whole ridge in older days, and even now the arable reaches to within a few yards of the camp's western wall, though the actual area is given back again to the turf and the gorse. Of the original earthwork nothing remains beyond a bold scarp encircling the western half of the hill-top. Of the vallum not a vestige remains: its detritus has so completely filled the fosse below that for the most part it is a mere terrace under the scarp, which at its highest rises perhaps to 7 or 8 feet.¹ On the eastern side are traceable no works at all, albeit the fall of the hill on that side is much slighter. Herein lies the explanation of their disappearance; here the plough could run right up to the ceinture and over it into the very area of the camp, whereas on the steeper western side this was not possible. The plan of the camp was elliptical, conforming to the hill, with entrances at either end. A trackway to Freshcombe Lodge bisects the area

¹ This is an interesting example of the effects of ploughing upon vallum and fosse, for there is no question that Thunderbarrow was provided with both. Both have vanished almost wholly, and only a scarp and terrace remain. This will probably explain a good many camps which seem to have had no fosse, *e.g.* the 62-acre camp of Ogbury near Amesbury, where the vallum rises nearly 30 feet, but the fosse is not discoverable. It has, perhaps, been choked up by the wastage of the vallum. At Codford Circle (p. 138) is to be seen much the same effect, though the vallum there, originally much slighter, is now almost level with the floor of the camp. Cp. also Blewburton Hill (p. 635, note).

along its greater axis, passing through the original gates. Outside the southern gate is a large pit, perhaps once a pond. The camp belongs apparently to a type of which the South Downs furnish two other examples, viz. White Hawk and Combe Hill. In each case the camp lies on the saddle of a ridge, in such a position that, while easily accessible in front and rear, its flanks are protected by the fall of the ground. All are further alike in their small size and weak construction. The major axis of Thunderbarrow¹ measured about 165 paces only, its area less than 3 acres.

Edburton Camp crowns (Fig. 216) a prominent hill-bastion of the northern face of the Downs, $1\frac{3}{4}$ mile to the north-north-east. In position it resembles Chanctonbury, as also in having one vallum and one fosse, but it is singularly small even for a Sussex fortress, measuring no more than 60 yards across the widest diameter of the diminutive area, and in plan is quite unlike any other hill-top fortress. The line of the defences follows the oval contour of the exiguous hill-top on all except the southern side, where it is interrupted by a depressed mound of 100 feet in diameter, the fosse looping outwards to cover the base of the mound. The whole plan, therefore, is at first sight much that of the simplest form of mount-and-bailey fortress. But on close examination this resemblance will be found to be less real than apparent: the mound is too low to have been a motte, for it does not attain even to the 10 feet or so of vertical height reached by the vallum on either side of it, and it can never have been much higher than it now is, for had it been greatly wasted the fosse along its southern side must have been far less deep than now, and the depression at its centre must have disappeared. More important still, the fosse is not carried round the northern side of the mound,

¹ "Thunder" represents the Saxon god Thunor or Thor. It occurs in Sussex at Thunder Hill, near Chiddingly, in Surrey at Thunderfield Castle, near Horley, and in Thunorbury, Hants (p. 205).

and apparently never was. The vallum to east and west rises to more than average height, but ends abruptly, neither reaching to the mound nor being continued round its base.¹ A shepherd's path traverses the area, passing

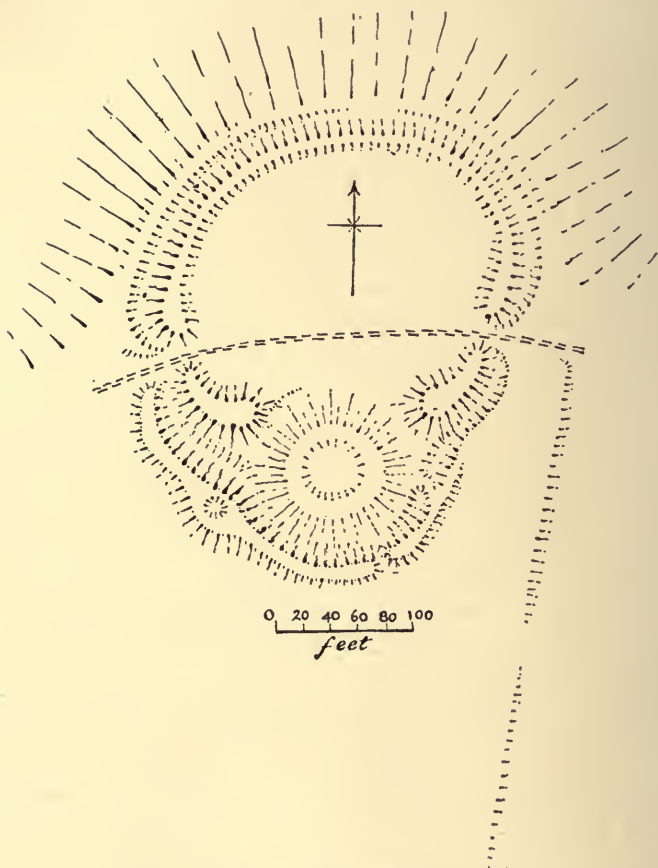


FIG. 216.—EDBURTON.

the vallum by openings seemingly both original in the eastern and western sides. From the western entrance

¹ The ends of the vallum approach so closely to the mound as to leave no room between for any fosse, the slopes of mound and of vallum meeting actually at the ground-level.

commences a second vallum, which follows the edge of the fosse right round the southern angle of the camp and then gradually disappears. It is at its highest in the angle where the fosse bends to accommodate the mound, and at this point is a circular depression about 8 feet wide in its broad summit. The great mound is neither flat-topped nor ringed by a vallum, but in its centre has a cup-shaped basin 33 feet in diameter and perhaps 3 feet deep. The ground to the south of the camp is to all intents level, but there are no signs of any outworks, unless a small and low mound 80 yards to the south-west be such. From the eastern entrance, where the slope is steeper, a very slight scarp is traceable for some 40 yards in a direction west of south. It is perhaps an old plough-mark. Fragments of pottery are to be found in the mole-casts along it. Further to the west lie several barrows which have yielded very early remains.

Of all the South Down camps this is the most puzzling : it would indeed be difficult to find another like it anywhere. It has been said of it that it "has nothing in common with the hill-forts (of Sussex)." ¹ One would rather say that it has everything in common with them except the mound. The nearest analogy to the mysterious mound with its depression is that within the area of Mt. Caburn, which would seem to have been a reservoir. ² It is much to be regretted that Pitt-Rivers, who explored the one, did not examine the other also ; and small as Edburton camp is, the task of exploring it completely would be an easy one. Meanwhile there is nothing but conjecture. Some have suggested that the mound was a beacon. If that were so, what was the need of the rest of the earthworks ? Yet they are all apparently of one plan with the mound and of one date. Others believe it to be a Norman fortress ; but against this is the absence of any encircling fosse about the whole of the

¹ Mr. G. Clinch in *Vict. Co. Hist. Sussex*.

² See above, p. 285.

mound, quite apart from the exceptional character of the site, at an elevation such that no water can have been found within several hundreds of feet at any time during many centuries past.¹ Edburton must remain a mystery until the spade is brought to unlock its secret.

Following the path eastward along the brow of the Downs, over Fulking Hill, one comes in little more than a mile to the Devil's Dyke Camp (Fig. 217), in type transitional between the promontory-fort and the fully developed contour-fort, and far the finest earthwork of the Brighton group. From the general mass of the Downs, here 600 feet in height, a narrow but considerable tongue is thrown out directly to the north-east, its summit rising to 700 feet. The sides fall away with extreme rapidity to the 300-feet level, while the further end is only a little less steep. The entire summit down to the 600-foot line is included within the ceinture of the camp: its extreme length is 880 yards, its average width 220 yards, and the area something over 40 acres. The ground within the lines has a considerable slope on the north-western side.

The assailable point being the southern end of the peninsula, here is the strongest portion of the defences—a fine wall of earth some 200 yards in length, still measuring in places 48 feet down the scarp. Could vallum and fosse be restored to their original proportions, the slope must have been fully 60 feet. The local name for this work is the "Poor Man's Wall," its alternative and quite legitimate title of the "Devil's Dyke" having been transferred to the abrupt combe which severs the peninsula from the adjoining Downs eastward.² At the head of this combe, in the southern angle of the camp, was the original

¹ Cymbeline's Mount (Fig. 129) stands at 500 feet above sea-level, but there was a spring close beside it in very recent times, whereas there is no trace of any such thing near Edburton Camp, nor of any well, unless indeed the mound be the mouth of one. Totternhoe, again (Fig. 133), is higher still, but has its own well.

² See on this matter, p. 499 *sq.*, above.

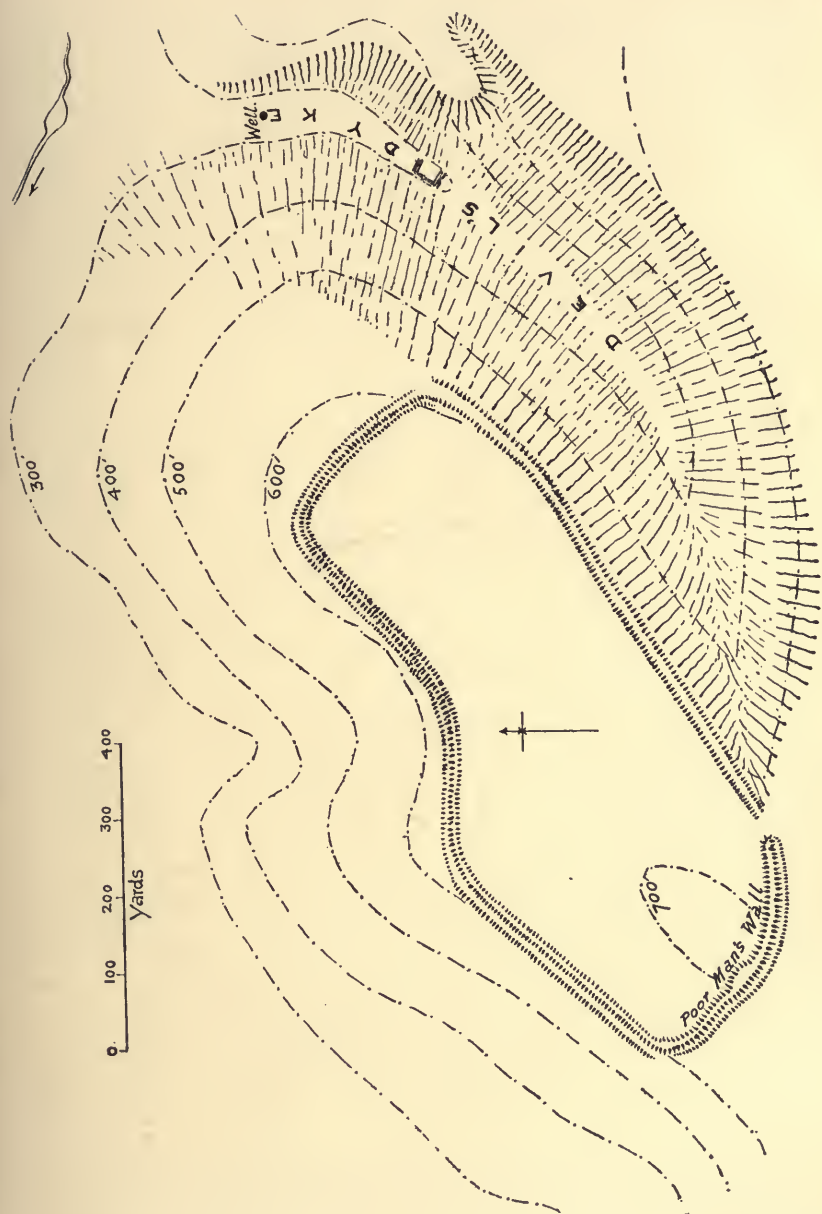


FIG. 217.—DEVIL'S DYKE CAMP.

entrance. The earthen vallum is continued round the whole area of the camp, but in much more modest form, the steep slopes rendering needless any very extensive fortification. For $\frac{1}{4}$ mile, indeed, along the north-western side the fosse becomes a mere level terrace with a slight additional scarp below ; but resuming presently its proper form, it runs round the entire hill, the inner vallum in places overtopping it by 10 feet, and its outer edge covered by a well-marked parapet. Both are well seen at the north-eastern extremity, where the approach up the hill, if arduous, is less so than elsewhere. Along the south-eastern side, which is almost straight, the entrenchments have been disfigured by a trackway leading down to Poynings, but the double vallum and intervening fosse are still quite recognizable. The outlook over the wide level of the Weald northward, and westward along the successive bastions of the hills to Chanctonbury Ring, is one of the finest in the Downland, and winter and summer the air is as tonic as that of a mountain-top. These attractions, and the broad stretches of firm, short turf to the south, have brought hither the ubiquitous golfer, whose flying ball makes the old fortress once again something of a Castle Dangerous. Coupled further with the factitious mystery of the so-called Dyke—the clean-cut, smooth-floored combe below¹—they have brought hither the railway, too, and the masses, and such abominations, mis-called amusements, as are supposed to appeal to the masses. An ugly hotel occupies the vantage-point, and about it are gathered other erections yet uglier. The camp is given over to blatant vulgarity, and a staring sign-board, which intimates that here are “Sites for

¹ Both these characteristics—clean-cut plan and smooth floor—are the result of ploughing, and that at no very remote date. Cause and effect may be exactly paralleled at Ravensburgh Castle, Herts, where the resulting appearance of combs and slopes is seemingly even more purposed than at the Devil's Dyke.

bungalows," threatens yet worse things to the once lonely hill. If the earthworks as a whole have thus far escaped much deliberate damage, it is not altogether so: the golfing fraternity, a class who might have been expected to know better, have coolly levelled some part of the Poor Man's Wall to make a "green." The shepherds, who lately had the spot all to themselves, have now deserted it, as surely as have the nymphs and the fauns, and all the year round the trains from Brighton—thank heaven, they are mostly out of sight!—vomit forth their scores and their hundreds, according to the season. There is no escape from the crowd here now, save betwixt sundown and early morning, and no escaping at all from the vulgarities of the place, except when darkness hides it and them alike.

Upon the floor of the combe is a bold, three-sided earthwork (Fig. 218), of unknown date.¹ At the combe's mouth is an old well, now fenced about and labelled "dangerous." Further on a stream comes down from Saddlescombe to run by Poynings into the distant Adur. It has been said that the queer little valley was used by early man as a cattle-fold, but there is no discoverable trace of any enclosing banks across it, even in the nakedness of winter time.

In the angle formed by the convergence of the roads from Hassocks and Hickstead to Brighton, close to Pyecombe Church, rises Wolstonbury Hill (677 feet). As both roads pass along the lowest levels, it follows that

¹ The vallum forms three sides of a rectangle measuring 100 by 60 feet, lying lengthwise along the floor of the combe, the open side facing to the east. The western bank is very slight and has no fosse; the transverse banks are much bolder (5-6 feet high) and covered by considerable fosses, the span of vallum and fosse together being 30 feet. They occupy almost the entire floor of the combe, leaving only a narrow passage-way of 6-8 feet. Viewed from Newtimber Hill, the longer side of the work is invisible, but the transverse banks have much the look of golfers' bunkers. Nothing seems to be known of it. Locally it goes by the name of the "Giants' Graves."

the hill is very decidedly isolated from the main chain of the Downs, the Hassocks road rising only to 430 feet, the Hickstead road to 341 feet. Although from most points of view it has the round, dome-like look of an exaggerated bee-hive, it is in reality an elongated hill with a decided curve, enveloping under its north-eastern face a deep, theatre-shaped combe, of which the floor is 300 feet below and the sides remarkably steep. Just at

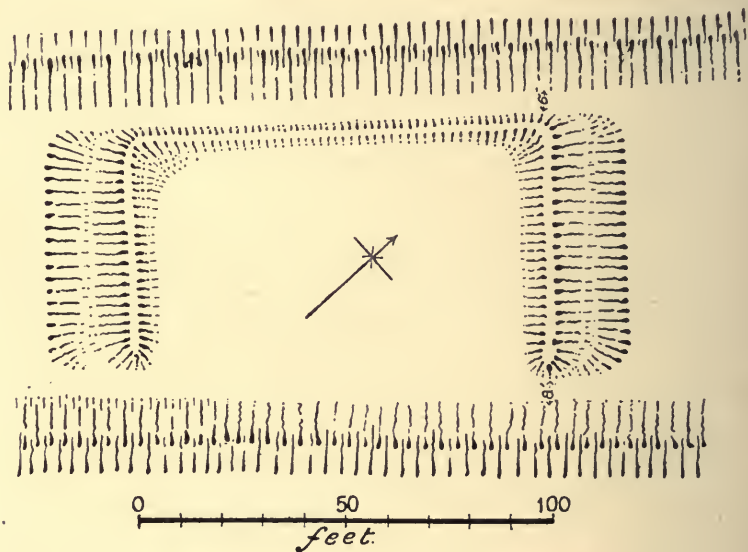


FIG. 218.—EARTHWORK, DEVIL'S DYKE COMBE.

the highest point of the Hassocks road the old trackway along the Downs from east to west crosses the turnpike, and following this to the left one climbs without effort to the crest of Wolstonbury. Three hundred yards from the crest a powerful fosse and vallum, commencing upon the brow above the combe, runs south-westward across the ridge and down the slope, with a gentle curve to the right towards Newtimber, thus covering the only tolerable approach to the camp. There is an embanked oblong work (12×8 paces)—seemingly a guard-house—just within the

vallum on the highest point of the ridge. The camp, of strictly contour plan, yet almost a perfect circle, sits like a crown upon the highest point of the hill, 400 feet above the surrounding plain. It still serves for a beacon.

Great as is the natural strength of the position, small advantage seems to have been taken of its possibilities. The camp is not large—some 250 yards across—and the defences (which, as usual in the South Down camps, consist of one vallum, one ditch, and a parapet where the slope demands it) seem never to have been very formidable. Scarred and mauled as they now are by numberless pits, and wasted by the weather of centuries, they look but feeble, the vallum nowhere rising more than 5 feet above the fosse, and usually much less. Nevertheless, the space between vallum and parapet (33 feet) is wide enough for the fosse to have been originally very formidable, though thus far excavation has not put the matter to the proof. The vallum is in many places all but level with the area, a fact which suggests that a very large quantity of material may have wasted into the ditch. Celts of flint, and others (it is said) of bronze, have been found on the spot, as well as Roman coins; and near Hurstpierpoint, $1\frac{3}{4}$ miles to the north, have been found the traces of a Roman villa.

Exactly three miles further east the Downs attain their greatest elevation in Ditchling Beacon (813 feet), sloping thence gently down to Lewes on the east and to Brighton on the south. The actual summit is marked by a beacon-hearth, standing within the area of Ditchling Camp, across which runs the old east-to-west trackway, probably passing through the original entrances. The camp (Fig. 219), which owes its irregular outline to the contours of the hill, lies mostly at the 800-foot level. Its simple vallum still rises some six feet above the fosse on the western side, and vallum and fosse wind right round the hill in quite respectable dimensions to the brow

opposite to Ditchling village. Along the northern side there was no need of any artificial defences, for here the Down rises like a wall out of the Weald. At the north-western corner, the lines are much broken and confused, and the probable explanation is to be found in two

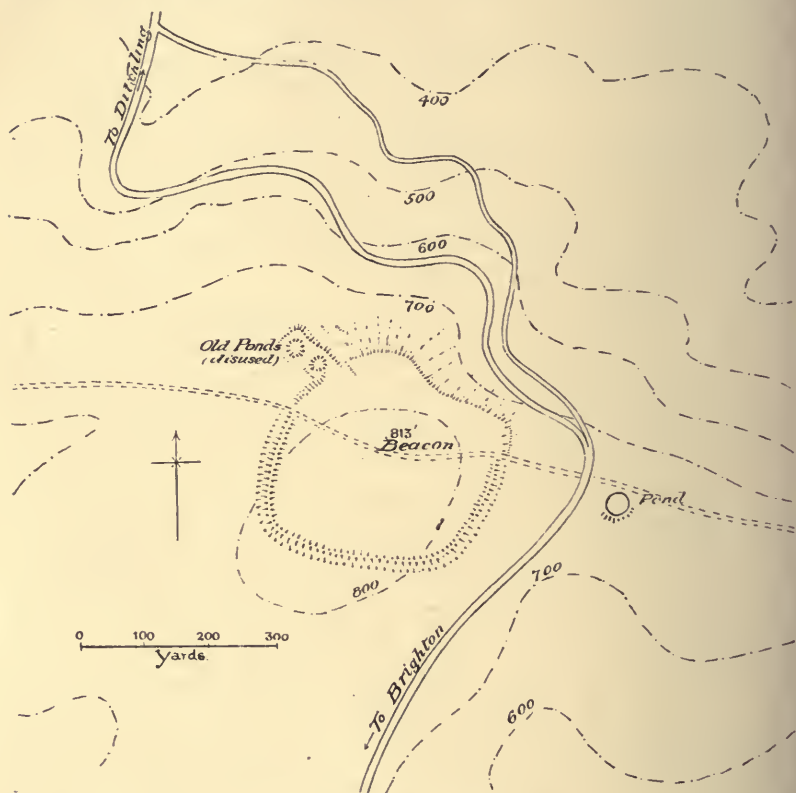


FIG. 219.—DITCHLING BEACON.

dew-ponds, of which the embankment abuts upon this angle of the camp. To judge by their appearance, these two ponds, one of which still holds a little water in winter, are as old as any of the kind in the vicinity, and at first sight they might seem to have been constructed as an appendage to the fortress; but a more careful examina-

tion will rather suggest that to their construction is due the mutilated condition of the camp at this point—that they are at any rate later than the camp. Some 150 yards east of the camp is another much more recent pond, and others of various sizes lie all along the trackway westward to Clayton windmills.

The altitude gives to the Beacon an unrivalled outlook towards all points of the compass, and makes it an ideal spot in which to idle away an hour or two of summer amongst the wild bees and the thyme. All Sussex is spread out as in a map beneath you, and your couch is the very soil on which your forerunners lived the simple life in the wide air of the neolithic time. For, whatever else be the matter of your dreaming, let them not be of Roman legionaries quartered here, startling the eternal silences with the clank of armour, and ever and again creeping stealthily down by the “sunken road” beneath the camp upon the Weald below. These be pleasant dreams for such as be not antiquaries. This is no Roman camp, no Roman road leads to it, and no Roman mind ever planned a sunken road out of it. “Ditchling Slype” is deep enough and steep enough in all conscience, but it is just what the trampling feet of men and beasts have made it in the course of centuries. Your dreams here should be of times and peoples yet earlier than the Roman—of taller warriors clad in skins and armed with stone, and of others harnessed in bronze or helmeted with the horned casque of the iron time, but not of those terrible squat interlopers who made such play with the short sword and the *pilum*, and carried upon their shields the blazon of the thunderbolt.

About $1\frac{1}{2}$ mile east again, between what is known as Plumpton Plain and Blackcap Hill, and just south of the isolated church of Plumpton, the Down is traversed from north to south by several slight embankments of dubious origin. The whole ridge eastward as far as Lewes is

thickly covered with tumuli, many of them so much weathered as to be barely discernible, and flint flakes and implements are strewn about. On Mount Harry, three miles west of Lewes and just north of the race-course, was begun the great Battle of Lewes in 1264, and many of the mounds thereabouts are traditionally said to cover those who fell in the fight in which Prince Edward, later Edward I., won his spurs although he lost the day. The Barons' army, moving from their camp at Fletching, scaled the Downs probably by the old trackway from Plumpton to Falmer, and formed for battle on Blackcap, just west of Mount Harry. A cross was cut into the turf to mark the actual scene of the fight, and it is said to be still occasionally discernible. The embankments mentioned above may conceivably have something to do with the fight. Close to Falmer are two valley-entrenchments of unknown date.¹

Hollingbury Camp lies three miles south of Ditchling Beacon, $\frac{1}{4}$ mile east of the road to Brighton. A contour-camp, in plan between a circle and a square, it is protected by one vallum and one fosse, with entrances to east and west. Although it stands at a height of 580 feet, the rounded swell of the Down to a great extent disguises the strength of the position, except on the eastern sides, where there is a more rapid slope towards the valley along which run road and railway from Brighton by Falmer to Lewes. The thick growth of gorse over the whole area has helped greatly to its preservation in spite of its near proximity to Brighton, and it is to be hoped that nothing will be done to harm it now that it is included in a public park. In point of extent and quality of its defences, it is one of the larger camps of the South Downs, covering upwards of seven acres, and having a vallum from 35 to 40 feet in width, still rising from

¹ See above, p. 147

8 to 12 feet above the fosse. Its good preservation notwithstanding, there can be no doubt of its antiquity, for Prof. Boyd Dawkins found abundant evidences of flint-manufacture in the vicinity, and within the ceinture has been found a hoard of implements of the Bronze Age. The slight remains to the south-west of what seems to have been a bank, or a "sunken way," running in the direction of Brighton, are possibly of no great age. The area, which is higher than the surrounding ground, is to all intents level, and the gorse makes it impossible to say to what extent the surface has ever been disturbed. A mound near the centre is thought to be a tumulus of the Bronze Age, and there are one or two depressions near it which may represent the sites of huts.

Two miles south by east, and $\frac{1}{2}$ mile from Kemp Town Station, White Hawk Camp covers the saddle of a spur of the Down that slopes towards the sea. Behind it the ground rises slightly towards Brighton race-course, while on the southern side the approach is for some little distance almost level. To right and left the slope of the hill-sides is more pronounced. The plan of the camp is—or rather was, for it is in great part destroyed—carefully adapted to its position, the defence being slighter at the sides, stronger to the north and the south, where a second vallum crossed the ridge of the hill at some distance in advance of the camp.¹ On the southern side the interspace is 100 feet or more. In general plan the camp is exactly like that on Combe Hill (Fig. 222), but larger in area, though far less strong by nature.

From Brighton eastward to Beachy Head the chalk Downs rest upon the sea, and save for the openings

¹ This camp furnishes a good instance of the inadequacy of most descriptions of such things. Of two reputable authorities, one mentions that the defences were doubled to the north, without any mention of the southern side; the other, while ignoring the north side, carefully describes the double vallum to the south. As a matter of fact, the traces of the second vallum are still distinctly visible on both sides.

formed by the Ouse Valley at Newhaven and by the Cuckmere Valley just east of Seaford Hill, they form an unbroken line of abrupt cliff, with no such flat foreshore as stretches along the foot-hills westward to Selsey and Chichester. Upon these cliffs are the remains of three prehistoric fortresses, at Newhaven, at Seaford, and on Beachy Head. Each is now a fragment only, the crumbling of the cliffs having carried away whatever works may have once existed on the southern side, so that it is impossible to say whether all or any of the three were of the contour-type or of the promontory-type; and as there is no certainty as to the rate of the coast's erosion, it is useless to discuss the point.

Of the camp at Newhaven, which lay immediately west of the present harbour, there remained in 1868 nothing at all but a portion (some 1,680 yards) of the vallum on the northern side, with the faintest traces of the outward fosse at one point only. The remainder of the lines has been obliterated in part by erosion, in part by the subsidence of the soil (here a plastic clay), and still more by the construction of the battery known as the Castle. In the process of constructing the latter was discovered a kitchen-midden, and others have since been found at intervals all along the coast eastward as far as Hastings. There was evidence enough in the way of bones, flint-flakes, and shards of pottery to confirm the attribution of the original fortress to a very early age.

At Seaford the remains (Fig. 220), though fragmentary, are very much more considerable. They occupy the somewhat steep hill (300 feet) east of the town, and command views east and west along the coast to Beltout and Newhaven. On the eastern side the area of the camp, which now measures about 400 yards along its longest (south) side, is protected by an entrenchment running straight north and south for 300 yards across the

hill. From the northern extremity this entrenchment turns sharply to the left and follows the face of the hill, almost directly west-south-west, for 400 yards or so to the edge of the cliff. The containing vallum, where it is boldest, still shows an outward slope of nearly 30 feet, and a perpendicular height of 13 feet above the present floor of the fosse. In the centre of the north-west side is an opening which may be original. It was once

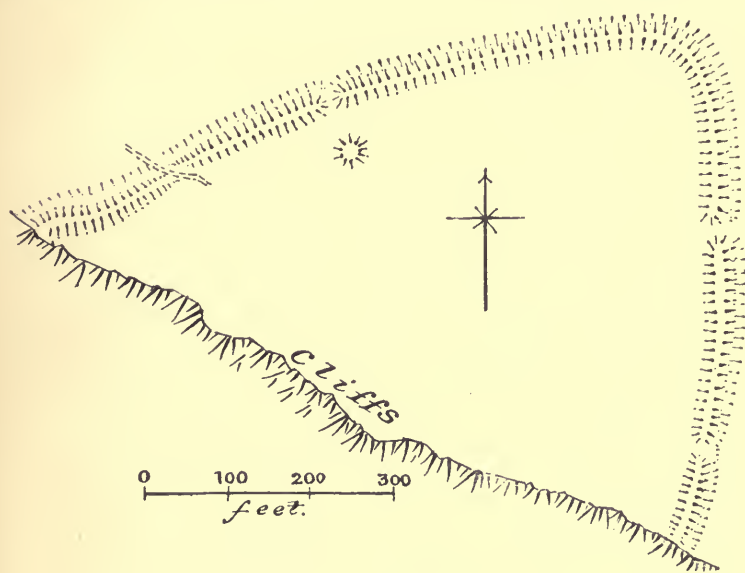


FIG. 220.—SEAFORD.

covered on the inner side by a slight mound. At the foot of the slope below, near to a spring, used to be some slight rectangular enclosures, which Pitt-Rivers believed perhaps to mark the site of a British village, and Roman interments have been found close by. The maps mark the camp itself as Roman, for no sufficient reason; and on the other hand the locality is prolific in flint implements. At the present date the golfer occupies the camp, and the builder is rapidly sapping up to its lines.

Beltout Camp crowns the cliffs of Beachy Head imme-

diately east of Birling Gap, and a mile west of the present lighthouse. The older lighthouse, now disused, stands within its lines, which, if feeble in relief, are very extensive in plan, the extreme length being as much as 1,200 yards, the extreme width 350 yards. There seems to have been but a single vallum, and an outer fosse is traceable only where the slight fall of the ground made it necessary. The elevation is 284 feet, and Pitt-Rivers remarked on the lack of any visible water-supply. The

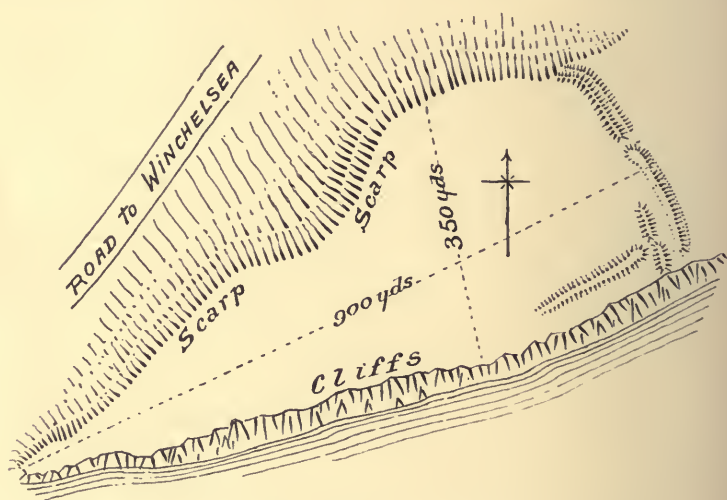


FIG. 221.—EAST HILL, HASTINGS.

Downs about the camp are thickly studded with mounds, probably tumuli, and the area of the camp is littered over with worked flints.

Where the chalk cliffs rise again on the further side of the wide Pevensey flats, at East Hill, Hastings, is a camp of promontory type, which seems to have suffered less from erosion than those further to the west, for there still remains what would appear to be a fragment of some original defences on the southward side (Fig. 221). The camp, which lies between the cliffs and the high road

to Winchelsea, at the eastern end of the town, lies, however, beyond the limits of this chapter, and is figured here only for the sake of comparison.

Four miles north of Beltout, on the saddle of Combe Hill (638 feet), just west of Willingdon, lies (Fig. 222) a small camp of the type already seen at Thunderbarrow and White Hawk Hill. The defences, again a single

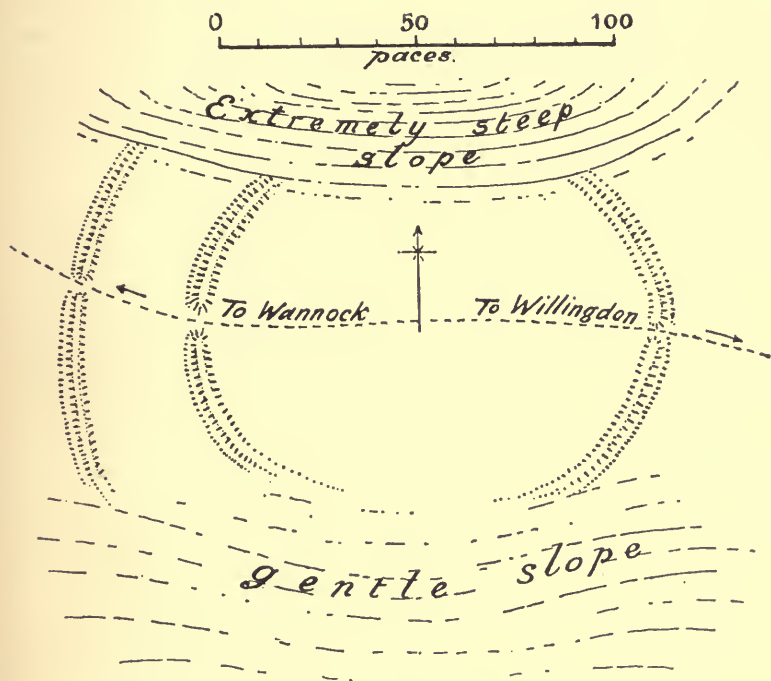


FIG. 222.—COMBE HILL, WILLINGDON.

vallum and outer fosse, have but the slightest relief, scarcely traceable on the south, where the fall of the ground is but slight, and disappearing entirely on the north, where the hill falls away with unusual abruptness for 300 feet to the bottom of a small combe opening like an amphitheatre towards Pevensey Level. The whole area is not more than 110 paces long and 80 paces wide.

Some 30 paces west of this a second vallum and fosse, again very slight, are drawn across the saddle of the hill as at White Hawk. Their length is 75 paces. Two notable barrows lie immediately adjacent; that to the west is a fine bell-barrow, about the eastern base of which the soil is full of the fragments of the rudest pottery; while that to the east, about 30 yards from the camp, is a small ring-barrow measuring some 12 paces across the area. The camp, albeit very small, commands a magnificent view on all sides, especially to the north and the east, over the lowlands of eastern Sussex. Westward rise Wilmington Hill¹ and Firle Beacon, and to the right of the latter is seen Mt. Caburn.

Mt. Caburn—the name is supposed to be derived from the Celtic *Caer Bryn*, “the hill fort”—is the easternmost peak (490 feet) of the isolated lump of Downs lying directly east of Lewes, anciently to all intents an island cut off from the rest of the world by the streams and marshes of the Ouse and Glynde Reach. Easily approachable from the north and the west, where it adjoins Ranscombe Hill, on the east and the south it rises direct out of the levels, and the slippery turf makes it to this day difficult to scale. The conical summit is ringed about by a vallum and fosse of great size (Fig. 223), distinctly visible from every point, but best seen as one approaches them from the north by way of Saxon Down. The camp, though measuring only about 400 feet by 350 feet, is very strong for its size. To the southward, where the

¹ On the northern face of Wilmington Hill, cut out of the turf, is the “Long Man,” or “Wilmington Giant,” the rudely executed figure of a man grasping in either hand a staff. Its origin is entirely unknown, and it has been variously attributed to the monks of Wilmington Priory, to the Saxon settlers—the name of Polegate, close by, is said to preserve that of Pol or Baldur—and, of course, to the “Druids.” There are similar “giants,” e.g. at Cerne Abbas in Dorsetshire, and the “white horses” of Uffington and Westbury are analogous, as also, perhaps, the crosses of Whiteleaf and Bledlow in Bucks.

steep hillside renders little defence necessary, the vallum is weaker, and the fosse barely more than a terraced scarping; to the north and north-west they are of fine proportions, and at the most assailable point they are doubled. Two entrances open upon the adjacent saddles of high-ground: that towards Ranscombe (west) is a simple gap;

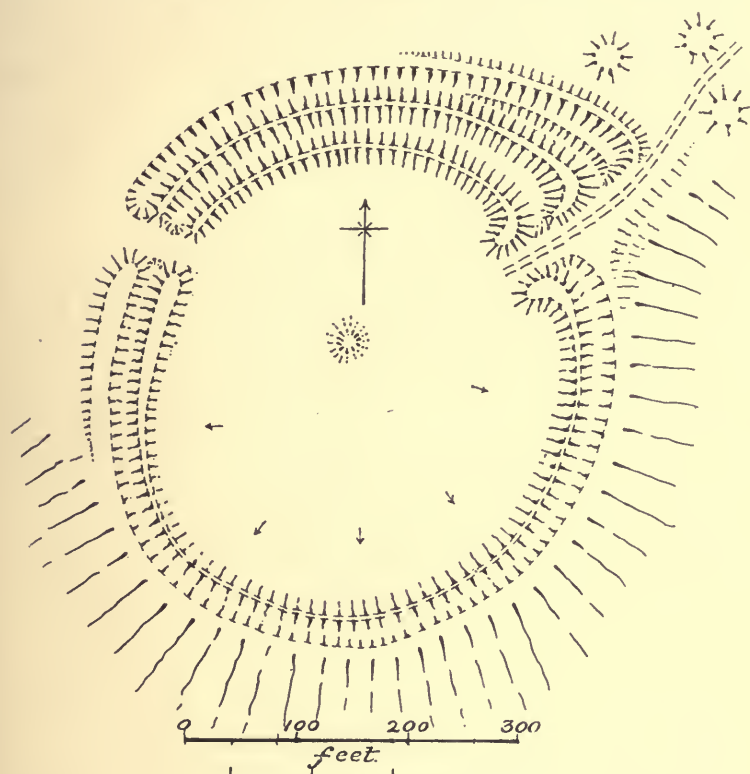


FIG. 223. —MOUNT CABURN.

the other is covered by the familiar re-entering curve of the valla, and by three low mounds lying immediately without the gateway. The entire area is dotted over with pits, more than fifty in number, and near the centre is a large depressed mound containing a circular basin-shaped hollow.¹

¹ See p. 284.

Pitt-Rivers explored the camp. He showed the pits to be the sites of wattled huts, the larger hollow to be a catchment basin provided with a drain to feed it ; and he established the date of the entire camp as Late-Celtic.

A mile or so north of Mt. Caburn, in Ringmer Holt, so thickly overgrown with trees as to be with difficulty discoverable, is an anomalous earthwork, pear-shaped, and said to have its floor hollowed out below the surrounding ground. Dr. W. Martin excavated it, as well as the undergrowth would permit, but arrived at no conclusions as to its purpose. It can scarcely have been a defensive work. The extreme measurements were only about 300 feet by 200 feet from lip to lip of the vallum.¹

Of the once fine camp on Ranscombe Hill, only 500 yards away from the western gate of Mt. Caburn camp, there remains nothing but a fragment of the eastern defences. These once consisted of a fine vallum, ditched where the ground called for it, but elsewhere scarped only. They have been all but obliterated by constant ploughing, though what profit can be had of a soil so utterly stony as is the area it is not easy to see. Not even in Cissbury itself is the litter of flint-flakes and chips more extensive than here. Excavation has proved this to be the site of a camp of much greater age than Mount Caburn, but apparently re-occupied during the Roman period. Upon the hillsides about are traces of lynchets, and in the cup-shaped valley called Bible Bottom to the north is a series of rectangular enclosures, faintly traceable still when the light serves, which are supposed to mark ploughlands of great antiquity.

South of the valley from Mt. Caburn rises Firle Beacon, a bare mass of chalk reaching the height of 748 feet. Its northern face is as precipitous as that of Caburn itself, but on the further side it trends more gradually down to the

¹ It is figured and described in the *Antiquary*, January, 1907.

water's edge at Seaford, over some 4 miles of undulating downland, much of it unbroken and unenclosed. But this section of the Downs has no camps to show : its only earth-works are barrows. A fine bell-barrow, disfigured by its later use as a beacon, marks the actual summit, and little more than 250 yards to the west is an odd mound of earth, certainly artificial,¹ but of quite uncertain date. Right and left along the ridge lie other tumuli of the more usual shapes—bowl-barrows of Celtic type and the diminutive ring-barrows of Saxon age—and on the brow of the hill overhanging West Firle is an abandoned mill-site with certain attendant pits and banks, which have before now provoked needless speculation.² In the churchyard below—the church possesses a series of brasses probably unequalled in the county, and an alabaster altar-tomb to Sir John Gage and his wife (1569), which for Florentine realism and beauty of detail may hold its own with anything of the kind in the country—lies buried a late rector who spent much of his time in exploring the Downs ; and the old wives of the village will tell you with solemnity that he was for ever seeking a certain silver coffin said to be buried somewhere in the hills. Whose the coffin was, and how it came to be buried there, they know not, as little as they know the precise spot of its concealment ; but that it *is* there they have no doubt whatever, “for,” they argue inconclusively, “in old times there was war up on The Hill.” To this portion of the world Firle Beacon is The Hill, as the sign-posts testify.

¹ This is a barrow-like mound, lying east and west, about 90 feet in length and some 10 feet in height. The traces of the trench made in throwing up the soil are still discernible along the northern side. To all appearance it has been tampered with by indiscreet diggers. The “Long Burgh,” upon the slope of the hill, $2\frac{1}{2}$ miles south-east, overlooking Alfriston, is almost certainly a long barrow, and if this mound on Firle Beacon be not another, it is impossible to say what it can be.

² See p. 535, foll.

To anyone who has carefully examined the camps above described, two remarks at once suggest themselves: firstly, that closely scattered as they were, they nevertheless left unoccupied very considerable areas of the whole Downland; and secondly, that with one or two exceptions they are of small size and of feeble construction. With the exception of Burpham Camp and the more doubtful camp on Edburton Hill, they are all unmistakably British, that is, of an age preceding the Roman occupation, though some may be earlier and some later than others. There is nothing necessarily Roman about any of them, and excepting barrows, plough-marks, and perhaps boundary dykes, nothing later than Roman times. The fact illustrates the general rule that the handiwork of Roman, Saxon, Dane, and Norman belongs usually to the lower levels. To all seeming the Downs were thickly peopled before the Roman time, but lost their population at that date. It has never returned to them; one can be more lonely to-day on any one of their broad, smooth uplands than anywhere else in south-eastern England. But the ancient population were not remarkable either for the scale of or for the skill shown in their defensive works. Cissbury and the Devil's Dyke excepted, not one of the camps is of any great size or dignity; and if the two exceptions be great amongst so many feeble brethren, as compared with the magnificent earthworks of Wiltshire and Dorsetshire they are nothing remarkable. One infers that the primitive population was numerous indeed but not warlike, nor very progressive—a pastoral folk in the main, with no great leanings towards violence and war, and perhaps having little intercourse with the contemporary peoples about it. This conclusion is borne out by the independent testimony of the flint-hunter. He finds upon the Downs implements in hundreds, but they are mostly of two or three definite types, and those essentially unwarlike—rude unpolished celts which may have served the

purposes of agriculture, scrapers and borers, knives, hammerstones and pot-boilers—but only by very rare exception does he pick up unquestionable weapons of war. The fact may point to a racial difference. There was as much chance for an earlier race, as for the later South Saxon, to live and develop in its own way in this out-of-the-way corner of Britain, while as yet the Weald was as impassable to the north as was Romney Marsh—Ruimne, “*the Marsh*”—to the east, and the Mòr Tawch, “the grey sea,” to the south.

CHAPTER XX

DOLEBURY

*"Smiling the wan set smile of one
That dreams upon an old content,
She sits forsaken and alone,
For whom the nations came and went,
When kings from western dale and down,
And sailor folk in southron prow,
Bare tribute to the iron crown
Still firm about her withered brows."*

THE long range of the Mendips, gathering greater elevation as it stretches further westward across Somersetshire, reaches its highest in Blackdown Hill (1060 feet), a rounded mass which would be featureless but for the great barrows that break the monotonous curve of its sky-line. Here the range drops abruptly, and falls away in a number of hill-terraces, to the low-lying meadows of Wrington Vale. Through this vale runs the great highroad from Bristol, at first north-east and south-west, but presently swinging due eastwards to climb Shute Shelve and to drop down to Axbridge at the foothills, looking right over the peat-mosses to the ridge called by courtesy the Polden Hills. Beyond the low ground, westward and southward and northward, the hills rise again, more or less isolated and broken, small, without definite system. They dot the ocean-floor of the dead-level like so many icebergs torn from some greater

mass and slowly drifting out to the Severn Sea, which sleeps, dull and grey, along the western horizon. Within the curve of the Bristol Road, immediately under the north-west shoulder of Blackdown, lies the hill that carries the most elaborate fortress in all Mendip—a mere mound of green and grey, alternating turf and limestone, treeless, and unadorned but for the double tiara of Dolebury Camp. The Mendips can boast a dozen or so of earth-works. Maesbury is fine; Blacker's Hill is impressive; the works at Burrington have the interest of the peculiar, and those at Charterhouse and Priddy that of mystery; but Dolebury is unchallenged in its magnificence. Between the almost precipitous slope to the south and the gentler but still steep fall of the ground to the north, the summit of the hill affords a narrow fiddle-shaped plateau, 20 acres in extent, with a regular but decided tilt upwards from west to east. This plateau is the area of the camp, the defences of which, cutting straight across the hill at its point of greatest elevation, stand up against the sky with fine effect from every side. Beyond them the plateau somewhat narrows again to a level "neck" of but 70 yards in width, still running eastward, until it broadens out finally and disappears in the general level of Dolebury Warren. It is seldom that one finds a camp of any magnitude so situated that it can be overlooked at a glance. Dolebury is one of the few exceptions and one of the best of them. Immediately to the west of it, beyond the Bristol road, the ground rises again to Dinghurst, itself the site of a camp; and from this point, thanks to its unbroken slope, one may see the whole of Dolebury, and especially the elaborate details of the western gate, almost as clearly as if laid down on a plan. Most of all is this so in the early morning, when the sunlight reveals details which might otherwise pass unnoticed. The western gate was obviously, so to say, the front door, for along the foot of the hill, where is now the Bristol road, ran an

ancient British trackway. Wrington Vale indeed must have been quite an important junction, where trackways from Gloucester and the north by Clifton Camps southwards to Banwell and Brent Knoll, met the east to west route along the Mendips from Wiltshire to Bleadon Hill, Brean Down, and Worlebury. Many of these positions are within the view from the camp itself.

It must be allowed that any attempt to explain why the greater camps stand just where they do is mostly matter of conjecture. We know so little of the history of their building and of their builders, so little indeed of the actual facts of life in the Britain of many centuries later, that there can be no certitude. That a position was more than usually defensible; that it offered a better supply of water and pasturage; that the soil was easily dealt with by these primitive sappers, or that the rock of the locality was abundant and easy to quarry;—these seem obvious reasons *when they happen to fit the case*. But it is not by any means always so. Why, for example, is Cissbury the finest of all South Down camps? It is one of the least defensible positions, and it has no water supply. Why is there so grand a fortress on the modest ridge of Dolebury, while Crooke's Peak, a few miles to the south, and one would say in a far more commanding position, has nothing to show? Was Dolebury's importance due to the mines? Was it the frontier fortress of some forgotten tribe? Its size and strength and elaboration declare it the work of a considerable community. Why were they considerable? Was it because of their position at this meeting of the roads—because of their command of the trade-routes to all four quarters of the compass? It is easy enough to ask questions, to suggest, to guess: and the only answer possible is that it may have been so. Dolebury may have grown as other settlements have grown at the meeting of the ways,—grown, that is, out of the coming

and going of wayfarers, out of the workings of peace, out of trade. Then, one would say, must the *Pax Britannica* have been a very real, very lasting, very lucrative fact, British trade a very considerable reality, at a date and in a society which commonly receive small credit for such pacific habits. Indeed the common notion of our British forefathers as creatures solely compact of war-paint and war is most certainly wrong. That *infinita multitudo hominum* whereof Cæsar speaks must have been an unexaggerated fact: and one can have no dense populations where peace is not more flourishing a plant than war. The monumental works of Maiden Castle, of Cadbury (Sutton Montis), the less impressive but stupendous walls of Dolebury and a hundred other fortresses, may imply the toil of immemorial years as much as of unnumbered hands; but such a work as Stonehenge must presuppose an abiding peace, as well as multitudinous hands—a condition of society which guaranteed ample leisure to its peoples. This must be an inevitable conclusion, whether Stonehenge was the outcome of a pious collectivism or of an Egyptian absolutism.

Dolebury has no historian. Local tradition declares that it was built in one night, and the folklorist knows that this is a modest way of attributing it to the Devil.¹ In other words, its origin was already forgotten when the tradition first arose, and that was centuries ago. If one may have an opinion of such matters at all, it is the work of one people, laid out and completed upon one definite plan, a plan so spacious and involving so much labour as to imply a large and prosperous population.

¹ Rutter (*North-West Somerset*) says that in his time local tradition attributed it to the "Redshanks," by which, he explains, are meant the Danes. They may have occupied it for a time; they certainly never built it. To this day the native-born Somersetshire folk look with suspicion on red-headed strangers, and stigmatise them as "Dane's bastards," says Rev. C. W. Whistler (*Folklore*, vol. xix. 1).

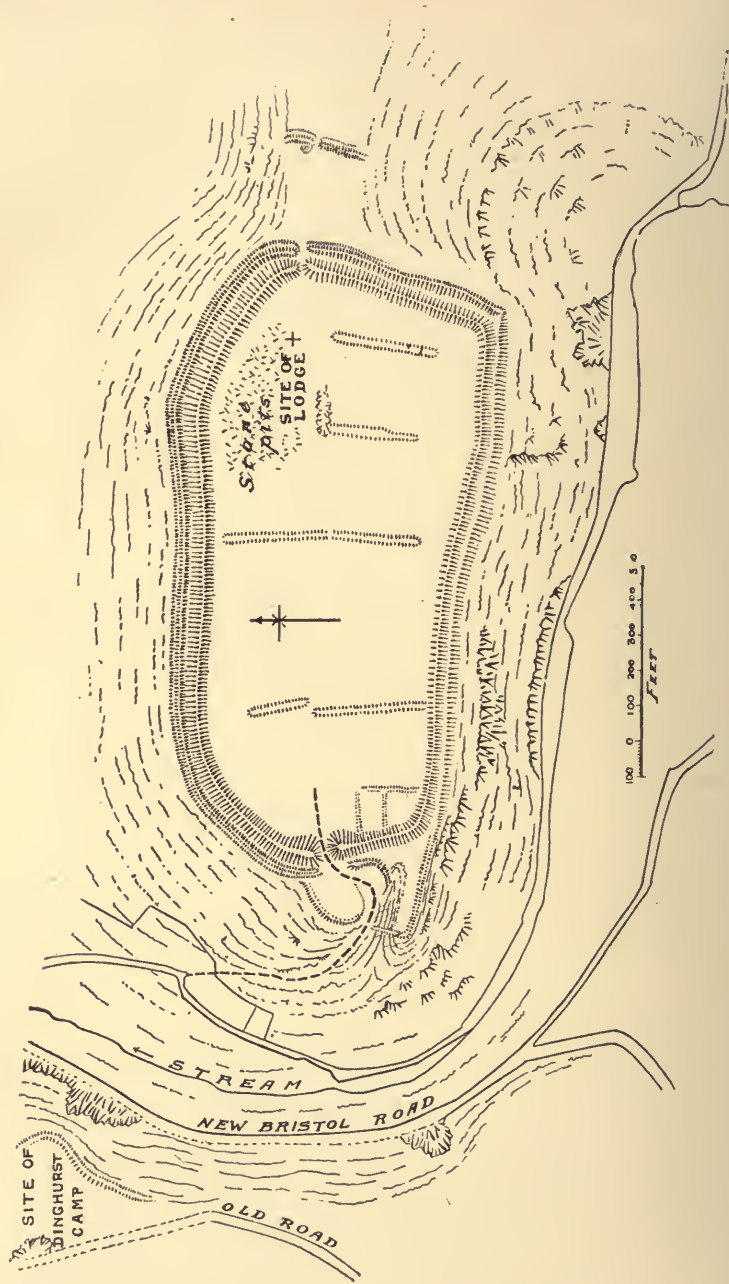


FIG. 224. — DOLEBURY.

But they have vanished as completely as the pixies : their very name is uncertain, and what was once the fortress of their pride, the sign-manual of their power, is now a rabbit-warren, and on the gate whereby one approaches the fortress a later inheritor has put up the notice that "Trespassers will be prosecuted." One wonders whether the Ancient Briton used any such outward and visible warnings to mark the boundaries of his demesne.

To this gate a stony lane leads from the main road, past a few tiny cottages, and so at once to the naked hill-side, where it continues as an obviously ancient track winding round and up the western end of the hill to the main entrance. This is placed almost in the middle of the western defences, two valla and two fosses, which, like those of the eastern end, cut straight across the level plateau of the hill, ignoring the actual line of contour. The valla are piled up of loose grey limestone, once probably in much bulkier masses, certainly much more steeply set than now, when the frosts of unknown centuries have split the stone to fragments and tumbled it down into the fosses. At the present time the height of the inner vallum at the entrance is perhaps 16 feet, and its measurement across the base is 18 yards ; for the ends of the vallum on either side are, as often, considerably splayed, forming roundish heaps of stone, in which imagination, if it pleases, may see the ruins of great round towers flanking the gate. The second or outer vallum is much smaller, and the dividing fosse much filled up. But ere they could reach this entrance, all who approached by the trackway had perforce to pass a truly formidable series of outworks. Outside the main defences the plateau throws out two spurs. One of these, in shape like a roomy round bastion, lies immediately in front of the entrance ; the other, a narrow level tongue of rock, runs due west from the south-west angle of the camp for

perhaps 70 yards. The two are separated by a small but steep ravine, now overgrown with bushes, but once perhaps a watercourse; and upon both may be seen the traces of earthworks. The bastion was originally fortified by a continuation of the northern section of the outer vallum, which, following the edge of the hill, curved round again towards the camp, making a complete *lunette* before the gate. It stopped short so as to allow the roadway to pass between it and the southern half of the outer vallum; but as this in its turn swings forward in a bold outward curve, the roadway lies for some yards immediately between the two fortifications, and passing downward round the end of the hill to join the lane it is still commanded throughout by the spacious bastion on the one hand, and on the other by the long spur overhanging the ravine. The vallum, which formed the southern defence of this spur, still distinctly traceable, runs in a right line from the southwestern angle of the camp to a distance of 60 yards, then turns suddenly to the north, and, crossing the ravine, comes up the other slope to within a few yards of the trackway. The ingenuity of this complex plan is remarkable. An enemy essaying to attack the fortress from the west must perforce follow the trackway, which winds steeply round a slope of hill so abrupt that only a small number can approach at once. It is enfiladed on the left for the whole of its course by the bastion above, and on the right firstly by the long spur beyond the ravine, and secondly for the last 30 yards by the curve of the second vallum. Through its whole tortuous course, much that of an S, it is absolutely commanded on right and left, while it must be remembered also that the immediate proximity of the outpost at Dinghurst put any hope of surprise out of the question. All along the northern edge of the plateau the double vallum runs contour-wise—a double line of gigantic stone embankment, some 550 yards in length, representing a truly enormous amount of labour.

On the southern side the hill is so steep that one vallum only was deemed sufficient protection, with here and there a little scarping of the rocky slope below. At the eastern end (the weakest part of the camp, because no fall of the ground here cuts it off from the outer world), both valla reappear, and increasing in height and strength as they gain the north-eastern angle, the highest point of the whole plateau, reach at last an amazing size. The immense slope of the inner rampart looks more like the rockstrewn side of some natural scree in the Cumberland hills than any work of man. The individual stones of which it is composed run to larger size here than elsewhere in the defences, and for some not apparent reason Nature has refused to screen the ruin of the walls with the same thin cloak of turf which elsewhere hides its fabric and disguises its ruggedness. One has to go to the chaotic *débris* of the old fortress of Penmaenmawr to find anything much finer than this piece of British building. The base of the inner vallum here measures over 20 yards through.

Close to this corner, the apex of the camp, the second entrance pierces the defences, and though it has nothing to show so elaborate as the outworks of the western gate, it has, nevertheless, its interest. After passing successively the inner vallum—its base is 20 yards—the first fosse (7 yards), second vallum (6 yards), and outer fosse (6 yards), one reaches a level oblong platform some 70 yards wide. North and south the slope of the ground served as defence enough for this platform but at a distance of 80 yards to the east, in which direction the ground is continuously level, was thrown up a third vallum and an outer fosse, each work 4 yards wide, directly across the platform, a narrow gap only being left for ingress and egress. The whole platform has been trenched lengthwise in recent times, and this may have obliterated all traces of the track along it. Abutting on the outermost vallum, just north of the gate, is a shallow,

saucer-shaped mound, which may conceivably be ancient. It is wiser not to jump to the conclusion that it was a guardhouse.

The area of the actual camp is so scarred and seamed in all directions with the traces of diggings, old and new, that one would think each successive generation had acted upon the old doggerel quoted by Leland, that

“ If Dolebyrie dyggyd were,
Of golde shuld be the share.”

The whole length of the northern half is pitted with the work of miners seeking for lead and *lapis calaminaris*, and one may pick up in an hour quite a respectable collection of mineral specimens—quartzites, hæmatites, manganese, “kidney” ore, and such. In the lowest (south-west) angle are a few low banks of rectangular plan and small dimensions, which may be older, but are probably relics of this mining population. The miners came and went, and Dolebury presently became, what it has been for a century, a rabbit warren. Near the north-eastern angle, where the surface has been broken in the obvious search for stone, are the remains of a small stone building. The Ordnance Map marks it as the site of a “watch-tower”; Phelps, verbose but matter-of-fact, says it is “the ruins of the humble dwelling of the keeper of the warren.” His successor of to-day lives in less desolate quarters, but looks after his rabbits as he should do—a most intelligent fellow, who has paced his sentry-go in Dolebury for thirty-five years, and knows nearly as much about it as is to be known, a great deal more than some “antiquaries” who visit it. He knew that it was no Roman work, but something vastly older; and, showing some small “dry dykes” arranged saltire-fashion in convenient hollows of the camp, laughed at the perplexities of wiseacres who had mistaken these for ancient *vestigia*.

The plan had the simplicity of all things that are efficient: the walls, instead of actually meeting in the centre, stop short so as to leave a gap of some 3 feet. In this gap was set a box-trap, its four entrances corresponding to the four quarters of the saltire. When the miners desired to add rabbit to their *menu*, they had but to choose a moment when their game had got well afield, and then organize a "drive." The rabbits of necessity, scurrying for shelter, ran into one or other of the funnels formed by the stone walls, and so into the trap at the end. It is all as obvious as can be; but when the box has vanished, and Nature has had a century or so in which to tumble the walls about, here break them down, there clothe them with turf, and generally disguise their original purpose, then the obvious is not altogether so obvious. It is yet another warning of the need of caution in matters of archæology. How easy had it been to see in these rabbit-traps the handiwork of Rome, and glorify them into agrimensorial crosses; or, admitting them to be inexplicable, how romantic to ascribe them to the occultism of the Druids or the Phœnicians! It is not so very long ago that the Phœnicians and the Druids were considered explanation enough for much that was quite obvious in earthworks, as well as for all that was not; and now that ridicule has killed the one heresy, there is just as strong a tendency—and as needless—to find the Roman everywhere. From this too Dolebury has suffered, for there are other difficulties here, less simple of explanation than the rabbit-traps. From north to south across the floor of the camp, at varying intervals, lies a series of four broad, low and straight banks, dividing the whole area into five unequal compartments. The two most easterly banks, which are comparatively short, measure only some 100 yards more or less in length, and therefore do not span the half of the total width of the camp. These two are parallel; they are 75

yards apart, and do not reach within 50 yards of the southern vallum. The third bank, more to the west, is again to all intents parallel, but much longer : its southern end comes to within 30 yards or so of the vallum, while between it and the northern vallum is left a passage of but a few yards only. The fourth and last bank lies some 120 yards within the western gateway, actually abutting at the south in the vallum and falling short of the northern vallum by 40 yards, while the bank itself is not continuous, but broken just at the middle of the area, so that the northern and southern portions lie a few paces out of the right line.

These banks, now dwarfed by long years of weathering, measure 10 paces or more in width, and are built with almost mathematical straightness. Doubtless their straightness was the reason which led originally to their being attributed to the Romans ; at any rate there is now a firmly-rooted idea that the greater pre-Roman works of Dolebury enclose a lesser Roman camp. Now there may be cases where such double occupation of one site is an indisputable fact, but whereas in such cases either the Roman portion of the earthworks tells its own tale, or excavation has proved Roman occupation, in the case of Dolebury there is no such proof. These parallel banks have none of the appearance of the *aggeres* of a Roman camp. They are too wide ; there are no transverse banks to complete the parallelogram ; and—most conclusive of all—there appears to have been a fosse *at each side of them*. Phelps indeed shows upon his plan, the intention of which excels the achievement, two transverse banks running east and west, and linking up the longer banks, but these are certainly not traceable now, and if they ever existed as he arranges them, they were certainly no part of a camp. They more resemble the ground plan of a week-end cottage of exaggerated dimensions. He speaks of them, however, as a Roman camp, and in the

extreme south-western corner the Ordnance Map also marks "Roman Camp."¹

There are plenty of cases, too, of British camps divided into two or more compartments by valla of apparently contemporaneous date; but there seems to be no other case where so many and so regular dividing walls occur. Moreover these banks, with the exception of the longest, do not actually divide the camp. They seem to be too regular both in line and in elevation to be ancient work, which usually weathers into irregular humps of soil, and they do not seem to be of the same date and construction as the defences of the camp.

One is tempted to attribute them to a comparatively recent date. They lack the regular distribution of the balks dividing ancient "furlongs," they are larger than one would expect such balks to be, and they do not parcel out the ground into areas even remotely similar in size. The couplet quoted by Leland seems to imply that at his date Dolebury was not a cultivated area, and that there remained no memory of its having been "dyggyd." Is it conceivable that their presence gave rise to the name of Dolebury, *i.e.*, the *bury* divided into *doles* (or shares)? Leland's doggerel shows that this was accepted as a possible meaning of the name. Where nothing is known one guess is as permissible as another; but though this one might serve to explain the name, it is no explanation of the origin and purpose of the banks.²

Right across the centre of the camp in 1904 was driven a narrow trench by the then owner of the property. It yielded a little pottery of indeterminate character, a quantity of bones of horses and oxen—these were found heaped together near the southern rampart—and

¹ A Roman pavement was discovered at Lower Langford, one mile to the west, in 1856. *Gent. Mag.*, 1856, part ii., p. 108.

² There are common lands ("Dolemoors") in the parishes of Congresbury and Puxton, a few miles to the west of Dolebury. See Gomme's *Village Community*, p. 268.

a stone described as resembling a modern harvester's whetstone. Unluckily it was not to be seen, but the description was not unlike that of a hard sandstone hammer which the writer picked up the very next year near the north-eastern corner.

It is said (Phelps) that "coins and warlike instruments of the Romans have been found within the area." Outside it, on the platform to the east, the writer saw picked up, in 1905, a socketed iron spear-head, three inches long. A couple of hours spent in the camp in the following summer yielded only a flint scraper and one or two chips of the same stone; and be it remembered that flint is on the Mendips always an imported article. There were found also two pieces of hard dark sandstone of puzzling forms. The one seemed to be part of a carefully fashioned pentagonal floor-tile, two inches at the side, and $\frac{5}{8}$ inch thick, polished to perfect smoothness on one side.¹ The other was a piece of the same stone, of the same thickness and similarly polished, but roughly chipped into the form of a disc $2\frac{1}{2}$ inches in diameter.

If Dolebury yielded up that day none of its secrets, it gave to those who sought them some hours of rare content. The hugeness of its ruins, the ingenuity of its defences, the perplexing mounds which break its area, may perhaps stir no interest in most minds, but few healthy people could resist the appeal of the wide outlook from its highest ramparts under a generous September sun—an outlook which embraces every change of scene from cliff to meadow, from peat-moss back to mountain, from upland stretches of native heath and bracken to

"bowery hollows crowned with summer sea."

An east wind made hazy the atmosphere, and shut out

¹ Similarly shaped pieces of grey limestone, but only about $\frac{1}{4}$ inch in thickness, have lately been found in Wookey Hole, associated with Roman remains, coins, &c.

the further view to the north-east, where under the eastward shoulder of Dundry Hill, Maesknoll leans upon Wansdyke. From south-east to south-west, Blackdown and Shute Shelf and Wavering Down fill their several foregrounds, so that the other many fortresses of Mendip, the two camps at Banwell, Brent Knoll's island-like hump,¹ the all but obliterated works on Bleadon Hill and those on Brean Down, jointly overlooking the Estuary of the Axe, are alike hidden. But Dinghurst lies almost within a stone's throw beyond Dolebury Bottom; across the Vale of Wrington is Yatton's Cadbury, the third and smallest fortress of that name in Somerset; between these two, on the edge of the Severn Sea rises the mighty camp on Worlebury Hill; and through the gaps in the southward hills one catches glimpses of the far-flung green level of the flats that run eastward as far as Glastonbury—"weary level meads" only to those who have no imagination. When the crown of Dolebury was first set upon the hill's brow, those flats were still a tidal swamp, if not a permanent arm of the sea, and where now they dig the summer long for peat, there drifted to and fro the oak-hewn punts of the Lakelanders of Meare. Dolebury was here when Saint Joseph sailed up to Weary-all Hill, bringing the Holy Grail. Dolebury saw on the eastern sky the flames of Bath's destruction by the Saxons; saw King Alfred's camp-fires in the fens round Athelney, and the Danes swarming down upon that last foothold of Saxon liberty—Hubba the Bloody and Guthrum; saw Hubba lose at once his life and the Raven banner at Uphill not 10 miles

¹ Somersetshire tradition asserts that Brent Knoll was a shovel-full of material flung thither by the Devil when that personage set himself to dig the Gorge of Cheddar. The camp (Fig. 48) is of unquestionably British origin, although some trifling finds of Roman character have been found within it. The neighbourhood was the scene of fighting with the Danes in the ninth century, and Battle Borough, in the lowlands to the south-west, preserves the memory of a fight recorded in *A.-S. Chronicle*, *sub an.* 855.

away, and Guthrum save his life by baptism, signing his famous recantation at Wedmore. If Dolebury could but speak!

The present highroad along Dolebury Bottom is of modern construction, an easier gradient to replace the older, which struck straight up over the steep scarp of Dinghurst, overhanging the Bottom and facing the western gate of Dolebury. The natives speak of the scarp merely as "the Batch," that is, the hill, and some of them are old enough to remember the time when the modern road was not. "I do mind when there was no road along Bottom," said one, "and I be eighty-seven. 'Tis a long time is eighty-seven years; but they do say that thikke yew-tree"—she pointed to a stunted yew growing out of the rock at its upper edge—"has been there ever since the world was drowned. But there was no road there then. Us just went over the Batch." The old road is still there: a broad and level belt, its metallated surface still showing clearly through the thin coat of grass, it winds up the slope and round the further edge of the hill. It cut right through the length of Dinghurst Camp, and what part of the earthworks it did not efface has been turned upside down by the usual mining-works. So much is the whole site trenched and pitted and cumbered with heaps of refuse from the diggings, that it is impossible to reconstruct the plan of the camp. Phelps speaks of it as surrounded by a double *agger* and fosse.¹ A single vallum which covered the eastern side may still be traced for most of its length, running along the very edge of the hill, and not as yet destroyed by the quarries which are gradually eating into the rock beneath. Two, if not three, considerable banks may also be made out, running hence at right angles, and cutting off from the main mass of the hill the promontory on which stood the camp. It was

¹ He adds that "rings, weapons, and bones have been found here," but gives no particulars.

probably from these that Phelps inferred a similar defence all round, but on the north and the west sides nothing at all can be made out. The fortress was a small one, and almost obliterated as it is, is not without interest. It is a capital instance of subsidiary fortification, and it shows that the military engineers of the time were hampered by no hard and fast theoretical rules of construction. The determinants were always the soil and situation. Although there is on the face of them no similarity between Dolebury and Dinghurst—the one earth-built, the other dry-walled—yet the two are very probably works of the same people, the two camps completely commanding the line of the old British trackway to Axbridge; for a people numerous enough to build Dolebury could not have permitted any other tribe to occupy Dinghurst. Conceivably Dinghurst is the older work, but if so those who built Dolebury must have controlled also the other fortress. It can hardly have been built later.

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